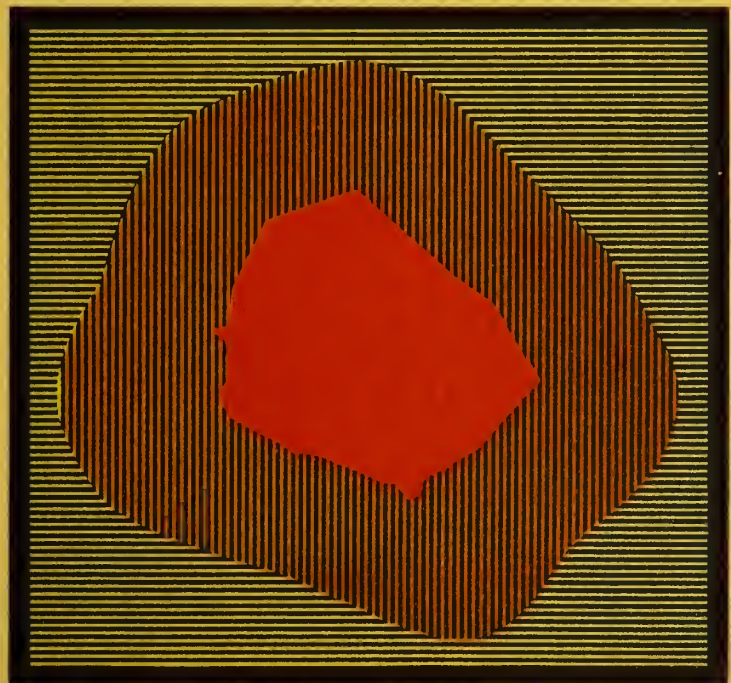


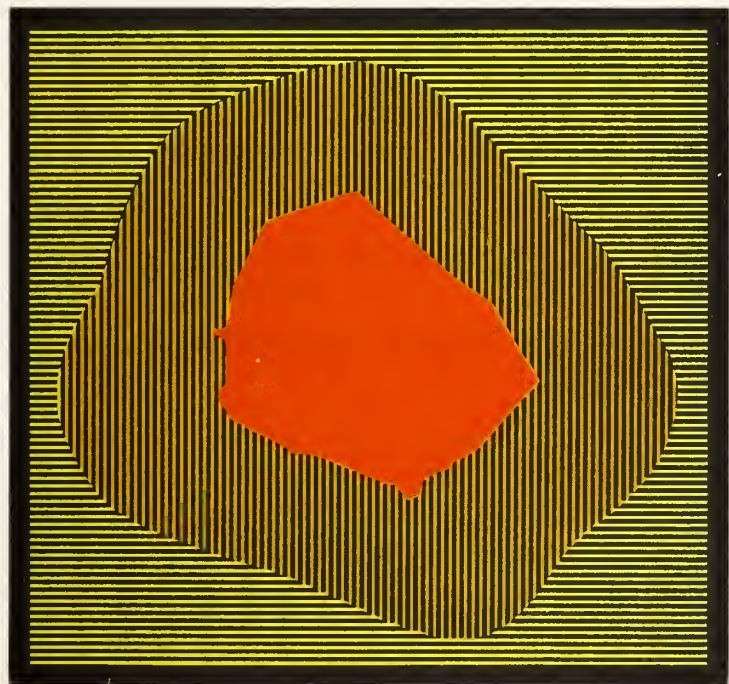
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LAND DEVELOPMENT PLAN



ALBEMARLE, NORTH CAROLINA

LAND DEVELOPMENT PLAN



ALBEMARLE, NORTH CAROLINA

The preparation of this report, was financially aided through a Federal grant from the Urban Renewal Administration of the Housing and Home Finance Agency, under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

Prepared for:

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February, 1965

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TO THE HONORABLE MAYOR AND THE CITIZENS OF THE ALBEMARLE
PLANNING AREA:

We are pleased to transmit the third in a series of studies entitled "Land Development Plan, Albemarle, North Carolina." Representing the objectives of the Albemarle Planning Board, the plan has been designed as a guide to promote the orderly development of the community over the next twenty years. Every effort has been made in the preparation of this study to keep it flexible and allow for changing conditions.

The plan has been adopted by the Albemarle Planning Board (including the Fringe Area) and approved in principle by the Albemarle City Council. Acceptances of the school recommendations have been stated by the City School System and the Division of School Planning of the State of North Carolina.

Preliminary approval of the Sketch Thoroughfare Plan has been granted by the Advance Planning Section, State Highway Commission. A separate, more detailed thoroughfare plan is being developed by that agency at a later date.

In the preparation of this plan we would like to acknowledge the cooperation of the many interested groups, and in particular Mr. W. D. Coleman, City Manager, Mr. Ernest Ross, Executive Director of the Albemarle-Stanly County Industrial Development Commission, Mr. Claud Griggs, Superintendent of the Albemarle City Schools, and other city officials.

Respectfully submitted,

*Division of Community
Planning*

800380

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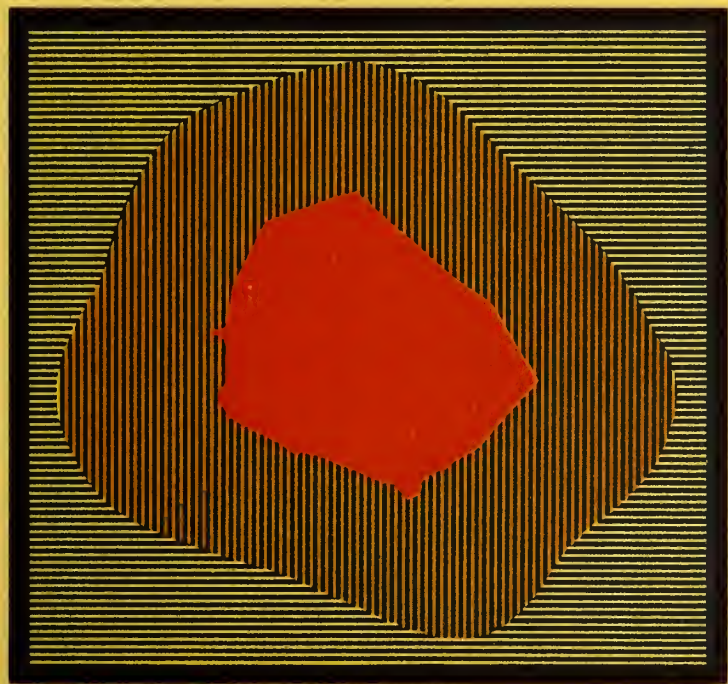
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PLANNING LEGISLATION IN NORTH CAROLINA

G. S. 160-22

"Every city and town in the State is authorized to create a board to be known as the Planning Board, whose duty it shall be to make careful study of the resources, possibilities and needs of the city or town, particularly with respect to the conditions which may be injurious to the public welfare or otherwise injurious, and to make plans for the development of the municipality." ...

INTRODUCTION



INTRODUCTION

This plan is the third in a series of studies prepared by the Division of Community Planning. The first two were A Recreational Study, and a Population and Economy Study. It was the objective of the Recreation Study (completed in the Summer of 1963) to analyze the existing recreational facilities available in Albemarle and then make recommendations for new and existing facilities based on good overall planning principles and standards. The Population and Economy Study was prepared and completed in March, 1964. It was the goal of this report to study and analyze the general growth, migration and economic pattern of the population and to detail the retail sales, manufacturing, labor force, and employment and unemployment patterns of the economy.

It was imperative that such studies be prepared as they became the foundation in formulating the Land Development Plan. The first three chapters of the Land Development Plan deal with the history in the development of Albemarle, physical characteristics (including soils, physiography and climate conditions) and analysis of the existing land use. Chapter Four formulates the future use of land and balances the best land uses to each other. However, such a plan as this has little value unless it is carried out and it is the goal of Chapter Five to deal with the tools available for implementation of the Plan.

The Land Development Plan is not an ironclad type of plan. It is merely a guide or blueprint by which the Planning Board, City officials, and citizens of Albemarle can make rational decisions concerning the City's growth over a period of approximately twenty years.

If Albemarle is to plan for orderly growth, it must have a Land Development Plan which analyzes existing land use conditions, provides projections for future needs, and establishes

a pattern of land uses for future development. Such a plan must be flexible and must be up-dated periodically if it is to be meaningful in carrying out the day-to-day decisions that will affect the future of Albemarle. However, it must be noted that the Land Development Plan is not an end in itself. Until implemented by the combined efforts of governmental and citizen action the plan has little value. As a plan it represents at a given time the best judgement of the Planning Board for the proper course of action to be followed. As an instrument for development --

- the general public benefits from orderly neighborhoods, good circulation, necessary community facilities (schools, police and fire protection) and protection of their homes within the neighborhood from incompatible land uses;
- the City Council benefits from such a plan in a way that day-to-day decisions regarding the community's growth can be carefully evaluated and programmed;
- the City officials benefit by an expression of their relationship in providing the framework of community facilities to the future pattern of land uses;
- the School Board benefits by being able to coordinate their facilities with those of the City;
- the Industrial Development Commission benefits by being able to coordinate their action with the City in attracting new industry;
- land developers benefit from a clear expression of corporate policy through which they are assured that decisions are objective and for the benefit of the entire community;
- the State, creating the corporate city, benefits from the orderly economic growth and the maintenance of a high standard of living for its citizens.

OBJECTIVES OF THE PLAN

In developing the Plan, the Planning Board has formulated the following objectives which it intends the Plan to achieve:

Social Factors

- To achieve an improved living environment for the community with an assurance of adequate facilities for the major human activities -- work, leisure, cultural, recreational, religious, educational, and aesthetic fulfillment.
- To stimulate an increased interest of the citizens in their community by emphasizing existing inadequacies and by providing means by which improvements may be achieved.
- To provide sufficient public facilities for all segments of the population. Schools, parks, recreational facilities, and fire stations are the major public facilities outlined within the Land Development Plan.
- To encourage the highest amount of civic responsibility by creating a neighborhood center (the elementary school-park and related areas) as the focal point of the neighborhood unit.

Economic Objectives

- To provide the most efficient uses of all community resources to insure the community's ability to finance required improvements, whether as individual citizens, corporations or a political entity.
- To improve the ability of the commercial and industrial activities to operate efficiently and productively; by reserving potential sites and locations and sufficient area for expansion; adequate circulation facilities, adequate utilities; and the reduction of those incompatible land uses in these areas.
- To improve city finance by encouraging the most efficient growth pattern, an increased tax base (thru industrial promotion), possible public aid, and a capital improvement program and budget designed to insure the most logical expenditure of public funds.

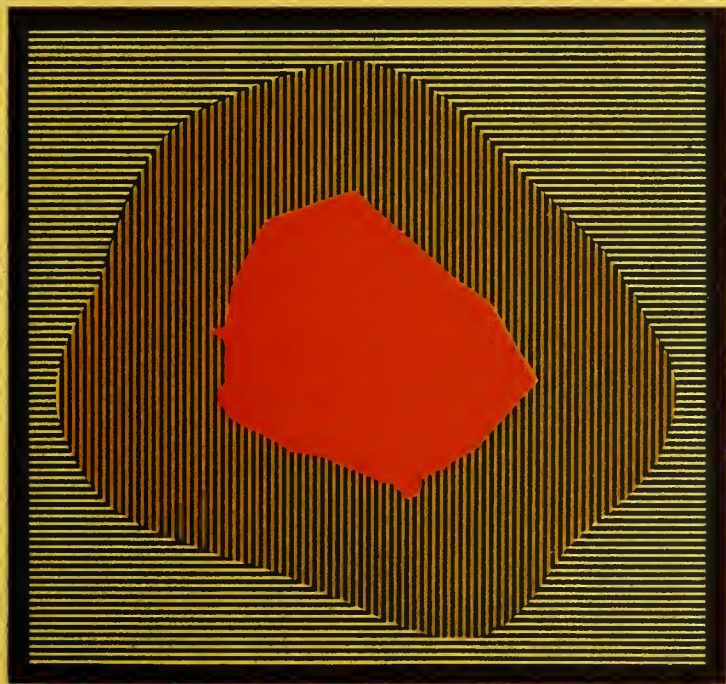
Community Policy

- To educate the general public and insure their understanding and acceptance of the goals of the Land Development Plan.
- To improve codes and ordinances to guide new development.
- To improve governmental processes to insure effective public action toward a better community.

Physical Pattern

- To insure a compatible and harmonious relationship between the various uses of land as they are developed for various community needs.
- To establish planning units which follow possible neighborhood boundaries and have similar characteristics or other physical conditions.
- To provide or retain the quality of housing areas; to provide better living conditions through adequate codes and ordinances; and to correct existing deficiencies.
- To encourage the compact development of the planning area by avoiding large vacant gaps in the developed areas thus reducing utility extension cost of the general city government.
- To provide coordination of the varied pattern of land use with circulation routes and facilities required for the efficient movement of people and goods and services within and to the city.

URBAN DEVELOPMENT



CHAPTER I

URBAN DEVELOPMENT

HISTORICAL SKETCH

The Cheraw Indians were the last of the Indian inhabitants around Stanly County, and by 1720 a majority of these Indians had moved into South Carolina and merged with the larger Catawba nation. Around 1750 settlers from Pennsylvania and New Jersey, largely Dutch, Scotch-Irish and German, began arriving in Albemarle and Stanly County. According to the Albemarle-Stanly County Centennial, 1957, the great rolling grassy plains relieved the people of clearing large stretches of open land and was one of the main factors in attracting the settlers from the North. The Dutch, Scotch-Irish and Germans settled mostly in the northern areas of the County, while the settlers in the southern section were mainly English, from Anson County, Virginia, and up the Cape Fear River. The settlers started new lives and began building and planning for a new future.

Stanly County was created by the General Assembly in 1841, using the Yadkin River as a natural boundary to the east. The County was named after John Stanly, a popular figure throughout the State at that time. Sixteen years later, on February 2, 1857, Albemarle was incorporated.

As time went on, Albemarle started to grow, and by the early 1880's it had a population of approximately 300 people. In addition to residential homes there were two churches, the Albemarle Academy, and two hotels. The old Court House stood in the middle of the square. There was not a manufacturing plant of any type. By this time, Stanly County had reached a population of approximately 10,506 people and had an area of 380 square miles.

With the coming of the railroad in 1891 Albemarle began to flourish and could then ship its crops to other areas. In the late 1890's and at the turn of the century, several

industries were founded in Albemarle. American and Efird, Wiscasset Mills, and Sibley Manufacturing were among the first.

By 1910, as defined in the U. S. Census, Albemarle had a population of 2,116; the County had a population of 19,909, 11 per cent of whom were classified as Negroes. The County population had increased by 90 per cent from the early 1880's.

Some of the major historical events that have affected the physical and economic development of the City are:

Prior to 1720	Indian settlement
1750	Settled by Dutch, Scotch-Irish and Germans
1841	County Seat located in Albemarle
1857	Town incorporated
1891	First railroad
1896	Efird Manufacturing founded
1897	Albemarle Telephone Company started
1898	Wiscasset Mills founded
1900	Sibley Manufacturing Company started
1905	Real Estate and Insurance Company started
1910	First electric lights
1911	Pre-depression era
1912	First municipal water
1916	First library
1917	Belk's Department Store started
1921	Stanly Hardware opened
1939	Carnation Plant started
1940	New library
1950-57	Hospital, Health Center, and YMCA
1960	Current era

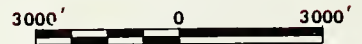
History of Growth

Albemarle can be traced back to the original city of 1857, with a series of annexations leading up to the present. Growth of the City by annexations is illustrated on Map I. In the enactment statement, Section II, when Albemarle was incorporated, it is quoted: "Be it further stated that the corporate limits of said town shall extend one-quarter mile in each and every direction from the Court House." The town was to be laid off on a tract of land not less than 50 acres; however, 51 acres of land were donated for the purpose of a new County Seat.

GROWTH BY ANNEXATIONS



Albemarle
Planning Area



Scale in Feet



Streets were laid out and cleared, and the corners were staked. The blocks were then carefully surveyed into lots and numbered.

The first annexation to the original city was made sometime prior to 1920 and included approximately 620 acres. The City was generally extended to the north, parallel with McGill Street; to the south parallel with a line between Summit and East Park Avenues; and the west and east boundaries were extended out at angles to Concord Avenue near West Main Street and Pee Dee Avenue near East Main Street, respectively.

The second annexation, and by far the largest, was made in 1947. It extended the boundaries generally outward to where they are presently existing. The annexation contained approximately 2,914 acres.

The third annexation was made in 1956 which added a small tip to the southern part of the City - an increase of approximately 41 acres.

The fourth annexation was made in 1958 and added a tip to the western side of the City which contained approximately 19 acres.

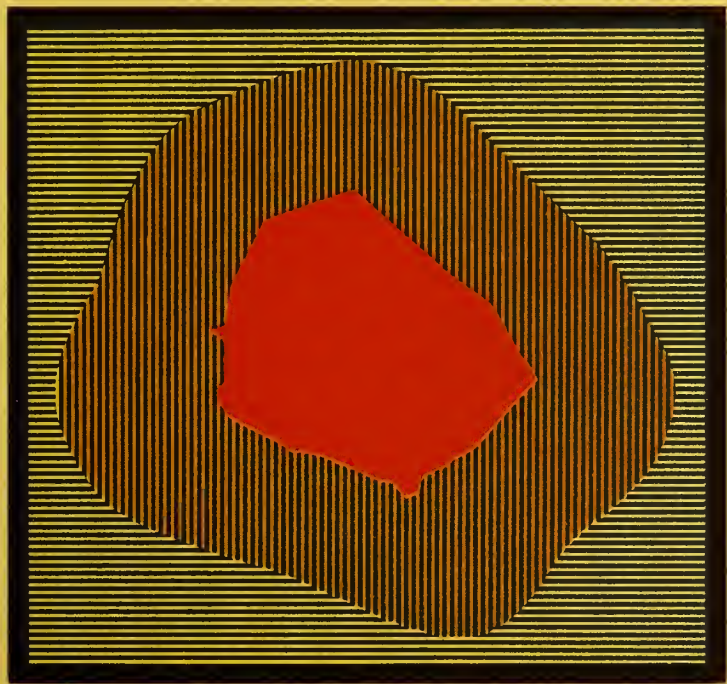
The last area to be annexed was a small parcel of land lying between the boundary of the City and N. C. 26 Bypass in 1960. This annexation was approximately five acres.

SUMMARY OF ANNEXATION GROWTH*

	Acres in Annexation	City Total in Acres	Square Miles
Original City of 1857	51	51	.08
Annexation prior to 1920	620	671	1.05
Annexation of 1947	2,914	3,585	5.60
Annexation of 1956	41	3,626	5.67
Annexation of 1958	19	3,645	5.69
Annexation of 1960	5	3,650	5.70

*Indicates approximate figures.

PHYSICAL CHARACTERISTICS



CHAPTER II

PHYSICAL CHARACTERISTICS

Physiography

Stanly County lies a short distance southwest of the center of the State. It is about 15 miles southeast of Salisbury and 25 miles east of Charlotte. Stanly County, with Albemarle at its center, is bounded on the south by Anson and Union Counties, on the north by Rowan County, on the east by Montgomery County, and on the west by Cabarrus County. The Rocky River forms the southern boundary while the Yadkin and Pee Dee Rivers form the eastern boundary to give the County a somewhat irregular shape. The area contains 408 square miles or 216,120 acres.

Generally, the upland area of Stanly County is a plateau dissected by the valleys of the many streams. The topography ranges from level, gently rolling, or rolling, to steep, hilly and mountainous. Beginning just about two miles north of Badin and extending southeasterly along the Yadkin and Pee Dee Rivers to approximately two miles north of Norwood is a belt of rough, hilly topography. Along Rocky River and the lower parts of Big Bear Creek, Long Creek, and other creeks emptying into Rocky River, the surface is steep or strongly rolling. Rolling to steep and broken land is also predominant east and northeast of New London and along Jacobs and Davids Creeks. In that area north of Norwood to the Rowan County line and west to Cabarrus County line, the land is generally rolling, becoming more rolling as the land approaches the streams. In the region from Mission south to Locust and in the vicinity of Red Cross, the land between the streams is level to gently rolling. This area of the County is generally called the "flatwoods."

According to the data of the U. S. Geological Survey, the elevation above sea level at Misenheimer is 674 feet; at Rich-

field, 650 feet; New London, 696 feet; Albemarle 456 feet; Efird, 438 feet; Porter, 502 feet; and Norwood, 363 feet. The western and northern parts of the County are higher than the southern part while the general drainage is to the south-east of the County.

The topography of Albemarle ranges from approximately 400 to 650 feet above sea level. Exceptionally hilly and rough terrain in the following locations are shown on Map II:

- to the north and northwest of the City;
- to the southwest, generally between S. R. 1267 and Old Poplin Grove Church Road;
- to the south, generally between S. R. 1963 and Long Creek;
- and to the southern position of the City just south of the airport.

The planning area is exceptionally well-drained by numerous branches (Coley, Melchor and Poplin) leading into the Town, Little Long and Poplin Creeks. These creeks eventually flow into Long Creek near the sanitary treatment plant at the end of Coble Avenue.

The County is drained by the Yadkin, Pee Dee, and Rocky Rivers. The Yadkin and Pee Dee carry the drainage of the eastern part of the County and the Rocky River carries that of the southern and western parts. Long Creek and Bear Creek drain the central part of the County, including Albemarle. Small drainage ways, many small creeks and branches extend into all parts of the County to provide adequate drainage. Map III, following this page, shows Albemarle and Stanly County in the regional setting of the Piedmont.

Soils

Stanly County lies within the Piedmont Plateau province. The soils may be classed into two general groups -- residual and alluvial. The residual soils have been formed directly

TOPOGRAPHIC MAP



Albemarle Planning Area

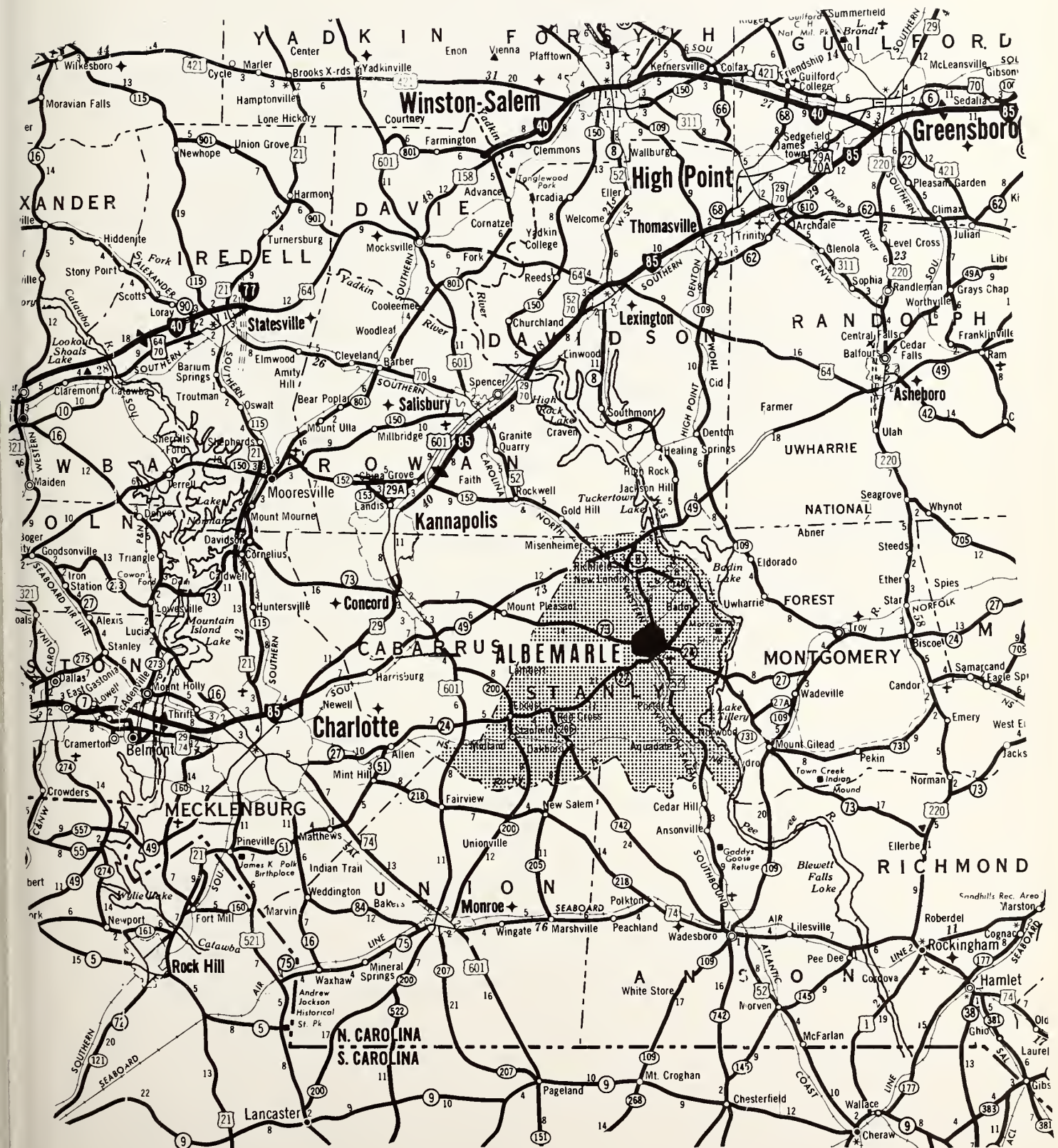
3000' 0 3000'
Scale in Feet



LEGEND

- CONTOUR LINES
- DRAINAGE

REGIONAL SETTING



from the underlying rocks through processes of disintegration and decomposition. Soils of this type cover most of the entire area of the County. Alluvial soils have been formed by the deposition of sediments by running water and occur in narrow strips contiguous to the creeks and rivers. Soils of this group are of small extent in the County.

The rock formations of the County are in two groups -- slates and intrusive dike rocks. The slates belong to the Carolina Slate Belt, a rock formation that extends through Stanly County and parts of Union, Anson, Montgomery, Rowan, Cabarrus, Davidson and Randolph Counties. They lie under the greater part of Stanly County and represent metamorphosed sedimentary rocks composed of volcanic ash. These rocks are very fine-grained, and upon exposure to the weather soften and break into small, angular fragments and chips which eventually disintegrate into silt.

The second group of rock formation is the intrusive dike rocks. These are confined almost entirely to the eastern half of the County and occur in dikes that have cut their way through the associated slate formations. The land surface of this type of rock is characterized in many places by hills and low mountains.

The soils classified as residual are the Georgeville, Alamance, Davidson and Iredell series. The alluvial soils are classified with the Congaree and Wehadkee series.

The County is characterized by 14 different soil types. Table 1 portrays the relative extent of each soil. Several of these many soils are predominant in the vicinity of Albemarle. Map IV is a generalized soils map illustrating the different soils in the Albemarle planning area (including the one-mile perimeter).

GENERALIZED SOILS MAP



Albemarle Planning Area

3000' 0 3000'
Scale in Feet



LEGEND

- GI GEORGEVILLE GRAVELLY SILT LOAM
- GI GEORGEVILLE GRAVELLY SHALLOW PHASE
- Is IREDELL STONY LOAM
- II IREDELL LOAM
- AI ALAMANCE SLATE LOAM
- A ALAMANCE GRAVELLY SILT LOAM
- As ALAMANCE SILT LOAM
- CI CONGAREE SILT LOAM
- D DAVIDSON CLAY LOAM
- W WEHAKKE SILT LOAM

TABLE 1 SOILS IN STANLY COUNTY - IN ACRES

Soil	Acres	Per Cent
Georgeville Gravelly Silt Loam	61,888-)	
Shallow Phase	42,496-)	44.7
Steep Phase	12,352-)	
Alamance Slate Loam	28,864	11.1
Alamance Gravelly Silt Loam	24,640	9.4
Georgeville Silt Loam	21,312	8.2
Georgeville Silt Clay Loam	16,448-)	
Steep Phase	1,280-)	6.8
Wehadkee Silt Loam	10,302	3.9
Rough Stony Land	9,792	3.8
Alamance Silt Loam	8,320	3.2
Georgeville Stony Loam	6,784	2.6
Davidson Clay Loam	5,696	2.2
Iredell Stony Loam	4,992	1.9
Congaree Silt Loam	3,968	1.5
Iredell Loam	1,344	.5
Congaree Fine Sandy Loam	640	.2
<hr/>		
Total	261,120	100.0

U. S. Department of Agriculture, Soil Survey of Stanly County, North Carolina, 1918

Georgeville Gravelly Silt Loam

This soil is predominant all over the Albemarle area with the largest concentrations in the eastern side of the City and beyond the city limits, northeast area beyond the City, and some small patches both within and outside the City to the south, southeast and northwest. The surface soil of the Georgeville Gravelly Silt Loam, sometimes called "red gravelly land," is a yellowish-grey to reddish-yellow silt loam passing at three to six inches into a yellowish-red heavy silt loam. The typical subsoil, beginning at a depth of six to twelve inches, is a bright red silty clay which usually extends to thirty inches or more and passes into the partially decomposed, pinkish and purplish slate rock. This type of soil occurs mainly between the streams, following the courses of main ridges and in places occupying the slopes leading to the streams.

The topography in which this soil is found ranges from almost level to gently rolling and rolling. As the land approaches the streams, the surface usually becomes rolling to strongly rolling. The drainage of both surface soil and subsoil is good. The permeability is usually from fair to good when used for septic tank purposes.

Georgeville Gravelly Silt Loam - Shallow Phase

This soil occurs throughout Albemarle and is also found to the north, south, southwest and western parts outside the City. The surface soil is a brownish, yellowish, or reddish silt loam from six to eight inches in depth. The subsoil is a light red, and in places reddish-yellow, silty clay loam and is underlain at ten to eighteen inches by slate rock. From thirty to eighty per cent of the soil consists of smooth rounded, reddish slate gravel and fine, angular slate particles scattered over the surface and distributed through the soil. In many cases the gravelly surface soil rests directly upon the slate. Frequently, broken slate fragments are found.

Land ranges from rolling to strong rolling -- the strong rolling occurring near the streams. Because of the rolling surface the run-off is good and in some places excessive. Where soil such as this is scattered throughout the area conditions for septic tanks would be fairly good; however, where the gravelly surface soil rests directly on the slate the conditions for septic tanks would be generally poor. In most cases, borings should be made to determine the relative extent of the soil.

Alamance Gravelly Silt Loam

This type occurs mostly in the eastern and southeastern sections of Albemarle. The surface soil is characterized by a light grey, grey, or yellowish-grey silt loam from five to eight inches in depth. The subsoil is characterized by a yellow brittle silty clay loam or silty clay extending to a depth of twenty to thirty-six inches where it passes into the underlying slate rock. From fifteen to sixty per cent of rounded, smooth, brown slate gravel and small, broken fragments of grey slate is scattered over the surface. The surface ranges from almost level to gently rolling and rolling. In the case with Albemarle the surface is more nearly level.

Generally, if the slope of the surface is over five per cent it is usually fairly good for septic tanks.; however, if the slope of the surface is under five per cent, which is generally the case with Albemarle, the soil would usually be very poor for septic tank purposes. Where the land is nearly flat, the soil is very tight and sticky.

Iredell Stony Loam

This soil occurs to the northwest, west, and southeast sections of Albemarle. Characteristic of the surface soil is brown to greyish-brown loam, passing at a depth of about six inches into a yellow or brownish-yellow loam or silty loam. The subsoil is at about eight or ten inches and consists of a yellow to yellowish-brown heavy, impervious sticky clay. This grades at a depth of twenty to thirty inches into the partially decomposed diorite. Fragments of diorite and massive slate ranging in diameter from two to twelve inches and a few boulders of the same rocks are scattered over the surface and embedded in the soil.

This type of soil occupies for the most part hills and ridges. The topography is rolling, strongly rolling or hilly, and the surface drainage is good to excessive. The underdrainage, however, is retarded by the impervious soil which would make it extremely poor for septic tank purposes.

Congaree Silt Loam

This type consists of a chocolate-brown or reddish-brown friable silt loam, underlain at depths of eight to fifteen inches by a light brown to brownish-yellow, compact silt loam or silty clay loam which continues to a depth of thirty-six inches or more. This soil, known as the flood plains, is found running contiguous to Long Creek from about one-sixteenth to one-eighth of a mile wide. Ditching in many cases is needed to provide surface and internal drainage. This soil is subject to overflow from the river and consequently would be poor for septic tank purposes.

Wehadkee Silt Loam

This soil is similar to Congaree silt loam as it runs contiguous to the creeks and streams. In this case, Wehadkee silt loam runs adjacent to Town Creek averaging approximately an eighth of a mile or less in width. This

soil has a grey, yellowish-grey, smooth silt loam six to eighteen inches deep. The subsoil, which is a brown silty clay loam, extends to a depth of more than thirty-six inches.

The topography of this type is generally level to wavy in the direction of the flow of the stream. This type, also known as the flood plains, is subject to overflow. The surface and underdrainage is poor and naturally would also be poor for septic tank purposes.

Alamance Silt Loam

This type has a surface which has a light grey to yellowish-grey, flour-like silty loam, grading at two to five inches into a pale yellow silt loam that extends to a depth of eight to twelve inches. At thirty to thirty-six inches it passes into slate rock. This soil type is found in small patches to the north and southwest of Albemarle.

The topography of this type of soil varies from almost level to gently rolling and rolling. The surface drainage and underdrainage for the most part is adequate, but there are a number of small depressions which have poor drainage. Where the underdrainage is adequate, septic tanks work fairly well; however, if the underdrainage is poor, septic tanks would not function properly.

Davidson Clay Loam

This soil is found in two small patches to the northwest of the city. The surface soil is a dark red clay loam ranging from five to ten inches in depth. The subsoil is a deep red or maroon, stiff, smooth clay, extending to a depth of thirty-six inches or more. This type of soil occurs on the crest and slopes of high, broad ridges, and on the slopes and at the base of hills. Both the surface drainage and underdrainage are good. Run-off on the strongly rolling areas is excessive.

Iredell Loam

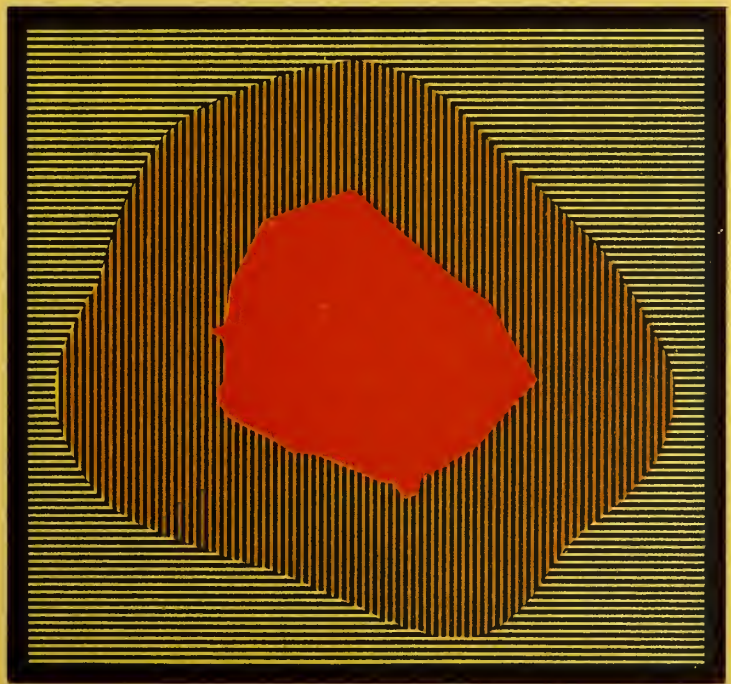
This type is located in a small patch just west of Albemarle near Long Creek. The surface soil is a dull brown to greyish, passing at three to six inches into a yellow loam that extends six to ten inches in depth. The subsoil is a brownish-yellow, sticky, impervious clay which grades into the diorite rock at fifteen to thirty inches in depth.

This type usually has a gently rolling to rolling topography. The surface drainage is good, but the underdrainage is poor, due to impervious conditions of the subsoil. This type of soil would be poor for septic tank purposes.

Climate Conditions

The climate of Albemarle is mild and healthful. The summers are long, but not excessively hot and the winters are short with no extremely cold weather. The mean annual temperature for January is about 42.2° and for July about 78.7° with a yearly mean temperature of about 60°. The average rainfall is 48 inches and snow fall about 6.4 inches.

EXISTING LAND USE





CHAPTER III

EXISTING LAND USE

Before it can be determined what is needed it is necessary to find out what already exists. This chapter deals with an inventory of existing land use development as well as vacant land within the Albemarle Planning Area. It will analyze the amount of each land use both as a total for the City including the fringe area and by planning units (sub-districts of the total planning area). By knowing how much land is available, where existing development has occurred, and providing realistic projections, it is possible to show how much land is needed and where land is most likely to develop in the future.

The existing land use patterns portrayed on Map V, which follows page 18, were obtained from a "windshield" field survey covering the entire planning area. For the purpose of analysis the following detailed classifications were used:

Residential

- Single-Family: a one-family detached structure.
- Two-Family: a two-family and semi-detached structures.
- Multi-Family: a structure or structures in which more than two families have their homes, e.g., apartment houses and group housing.

Commercial

Business:

Retail Trade: establishments selling commodities in small quantities to the consumer, e.g., department stores, automobile dealers, drug stores.

Wholesale Trade: establishments selling commodities in large quantities to retailers, e.g., wholesale foods, hardware, drugs.

Services:

Consumer: establishments providing intangible needs for immediate use, e.g., restaurants, barber shops, bowling alleys, broadcasting stations.

Professional: establishments of a business character which supply general needs of an intangible nature to the public, e.g., offices of lawyers, doctors, real estate.

Business: establishments of a business character providing maintenance, installation, repair or specialized office needs to individuals or other businesses.

Transportation:

Vehicular: shopping places for the interchange of passenger and freight including parking, e.g., bus stations, airports, railroad stations.

Non-Vehicular: non-moving containers which primarily collect and distribute the products of communications and utilities, e.g., substations of all kinds.

Streets and Alleys: public rights-of-way which include alleys, roads, etc.

Railroad Right-of-Way: rights-of-way and auxiliary land used by railroads.

Industrial:

Manufacturing: the mechanical or chemical transformation of organic or inorganic substances into new products regardless of their future disposition.

Manufacturing Service: establishments of a manufacturing nature or character which supply the general needs of a semi-tangible nature to the public, e.g., construction contractors, junk yards, warehousing.

Public: establishments that are owned by the public, e.g., schools, parks, governmental buildings.

Semi-Public: includes such uses as churches, cemeteries, and fraternal organizations.

Vacant or Farmed: undeveloped land or land used for agricultural purposes.

GENERALIZED
EXISTING LAND USE



Albemarle
Planning Area



LEGEND

- UNDEVELOPED
- RESIDENTIAL**
 - SINGLE FAMILY
 - TWO FAMILY OR MORE
- COMMERCIAL
- INDUSTRIAL
- PUBLIC AND SEMI-PUBLIC

To give the proper perspective to the total planning area Table II shows a detailed breakdown of the developed and total acreage devoted to the various land uses. (See page 19a).

The total planning area, including the City and the one-mile perimeter area, are divided into twenty-eight planning units. Table III shows in detail the various land uses within each planning unit as illustrated on Map V. The purpose of this delineation was to obtain information for analytical purposes on a smaller scale than was possible at the total planning area level. (See page 20a).

In delineating the planning units the following criteria were used --

- Neighborhood boundaries - areas that are large enough in population to support an elementary school;
- Areas that are principally non-residential uses such as the central business and industrial districts;
- Natural boundaries - such as highways, rivers, railroads and difference in the topography of the land;
- Other boundaries - such as the character and type of housing and the municipal city limit lines.

Vacant and Developed Land

Out of a total of 3,650.4 acres in the planning area, 2,325.4 acres are developed and 1,325.0 acres are vacant or are being used for agricultural purposes. Thus, almost two-thirds, or 63.7 per cent of the land within the city limits is developed.

In the fringe area the amount of land developed is much lower. Approximately 14.4 per cent, or 1,139.3 acres, are currently developed while 85.6 per cent, or 6,762.8 acres are vacant or farm land. New growth is tending to occur to the north, northeast, and east in planning units 9, 10, 11 and 12

TABLE II SUMMARY OF EXISTING LAND USE IN ACRES AND PER CENT OF TOTAL AND DEVELOPED AREA, 1963

	INSIDE CITY LIMITS			FRINGE AREA			TOTAL PLANNING AREA		
	ACRES	PER CENT DEV. OF AREA	PER CENT OF TOTAL	ACRES	PER CENT DEV. OF AREA	PER CENT OF TOTAL	ACRES	PER CENT DEV. OF AREA	PER CENT OF TOTAL
RESIDENTIAL	1160.7	49.9	31.8	373.7	32.8	4.8	1534.4	44.3	13.3
SINGLE-FAMILY	1129.6	48.6	30.9	373.7	32.8	4.8	1503.3	43.4	13.0
TWO-FAMILY	18.8	.8	.6				18.8	.5	.2
MULTI-FAMILY	12.3	.5	.3				12.3	.4	.1
COMMERCIAL	103.2	4.4	2.8	97.0	7.5	1.2	200.2	5.8	1.8
BUSINESS	71.6	3.1	2.0	40.1	3.5	.5	111.7	3.2	1.0
RETAIL TRADE	61.2	2.5	1.7	15.5	1.4	.2	76.7	2.2	.7
WHOLESALE TRADE	10.4	.5	.3	24.6	2.1	.3	35.0	1.0	.3
SERVICE	26.4	1.1	.7	32.0	2.8	.4	58.4	1.7	.5
CONSUMER	13.5	.6	.4	28.4	2.5	.35	41.9	1.2	.36
PROFESSIONAL SERVICE	5.0	.2	.1				5.0	.02	.01
BUSINESS SERVICE	7.9	.3	.2	3.6	.3	.04	11.5	.48	.14
TRANSPORTATION	5.2	.2	.1	24.9	2.2	.3	30.1	.9	.3
VEHICULAR	3.5	.14	.09	24.9	2.2	.3	28.4	.8	.24
NON-VEHICULAR	1.7	.05	.01				1.7	.1	.02
INDUSTRIAL	113.5	4.9	3.1	24.7	2.2	.03	138.2	3.9	1.1
MANUFACTURING	100.3	4.3	2.7	4.1	.4	.04	104.4	3.0	.9
MFG. SERVICE	13.2	.6	.4	20.6	1.8	.26	33.8	.9	.4
PUBLIC	106.5	4.5	3.1	48.9	4.4	.6	156.4	4.5	1.4
SEMI-PUBLIC	72.5	3.2	1.8	37.1	3.3	.5	109.6	3.2	.9
STREETS & ALLEYS	675.0	29.0	18.5	319.0	27.9	4.0	994.0	28.7	8.6
RAILROAD R-O-W	80.2	3.5	2.2	141.3	12.4	1.8	221.5	6.4	1.9
STREAMS & LAKES	13.8	.6	.4	96.6	8.5	1.2	110.4	3.2	.9
TOTAL DEVELOPED LAND	2325.4	100.0	63.7	1139.3	100.0	14.4	3464.7	100.0	30.0
VACANT LAND	1325.0		36.3	6762.8		85.6	8087.8		70.0
TOTAL LAND	3650.4	100.0	100.0	7902.1	100.0	100.0	11552.5	100.0	100.0

with an average of 15 per cent or more of these planning units developed.

The total planning area, including the area within the City and the fringe area, contains approximately 11,552 acres, or 18.1 square miles of land. From this total, 30.0 per cent or 3,464.7 acres are currently developed, while 70.0 per cent or 8,087 acres are vacant or being used for agricultural purposes.

Residential Land

The proportion of land used for residential purposes in Albemarle is greater than that of any other use. Some 1,160.7 acres, or 49.9 per cent, of developed land and 31.8 per cent of the total land within the City is devoted to residential use. Within the residential category alone, 97.0 per cent, or 1,129.6 acres, are occupied by single-family, while 1.6 per cent and 1.1 per cent are occupied by duplexes and multi-family, respectively. As a total of developed land, about .8 per cent or 18.8 acres are devoted to two family uses, while .5 per cent and slightly over 12 acres are devoted to multi-family units (apartments).

Within the fringe area nearly 32.0 per cent of the developed land is occupied by single-family. This accounts for about 373.7 acres. Duplexes and apartments are non-existent in the fringe area. Residential uses occupy 1,534.4 acres, or 44.3 per cent of the developed land, with only 31.1 acres or .9 per cent used for duplex and apartments in the total area.

Table IV (Structures by Classification) illustrates that there are about 3,669 residential structures within the City, of which 3,540 are single-family, 90 are two-family (duplexes) and 39 are multi-family (apartments). The duplexes and apartments do not follow any logical boundaries but are scattered throughout almost every planning unit; however, most of the high density residential structures are just to the north and

TABLE III

EXISTING LAND USE BY PLANNING UNIT
(IN ACRES)

PLANNING UNIT	RESIDENTIAL				BUSINESS			SERVICES			
	TOTAL	SINGLE-FAMILY	TWO-FAMILY	MULTI-FAMILY	TOTAL	RETAIL TRADE	WHOLE-SALE TRADE	TOTAL	CONSUMER SERVICES	PROF. SERV.	BUS. SERV.
1	65.3	64.5	.8	--	5.7	5.7	--	4.0	3.2	--	.8
2	350.8	343.6	3.7	3.5	13.7	9.5	4.2	4.4	1.5	2.0	.9
3 (CBD)	6.4	3.9	1.3	1.2	10.5	10.1	.4	4.1	1.7	2.0	.4
4	24.0	23.2	.4	.4	.1	.1	--	1.8	1.8	--	--
5	19.6	19.6	--	--	2.1	.8	1.3	.6	--	--	.6
6	95.1	94.8	.3	--	.9	.9	--	.1	.1	--	--
7	202.9	200.5	1.8	.6	13.8	13.4	.4	3.5	.8	--	2.7
8	78.5	78.0	.3	.2	3.3	2.8	.5	2.7	.8	--	1.9
9	84.5	80.9	.5	3.1	2.4	2.2	.2	.4	.4	--	--
10	13.7	13.7	--	--	6.6	3.9	2.7	.7	.3	--	.4
11	--	--	--	--	1.2	1.2	--	--	--	--	--
12	159.7	147.9	8.5	3.3	7.2	7.1	.1	2.2	1.0	1.0	.2
13	44.2	43.0	1.2	--	3.6	3.0	.6	1.9	1.9	--	--
14	16.0	16.0	--	--	.5	.5	--	--	--	--	--
CITY TOTAL	1160.7	1129.6	18.8	12.3	71.6	61.2	10.4	26.4	13.5	5.0	7.9

TABLE III (CONT'D.)

EXISTING LAND USE BY PLANNING UNIT
(IN ACRES)

PLANNING UNIT	TRANSPORTATION			INDUSTRIAL			PUBLIC SEMI-			STREAM AND LAKES	TOTAL DEV. LAND	TOTAL VACANT LAND	TOTAL LAND
	TOTAL	VEHIC- ULAR	Non- VEHIC- ULAR	TOTAL	MFG.	MFG. SERV.	PUBLIC	SEMI- PUBLIC	AND ALLEYS				
1	--	--	--	--	--	--	13.1	16.5	58.8	--	163.4	87.0	250.4
2	--	--	--	15.3	12.4	2.9	41.5	21.3	134.5	13.2	595.4	281.2	876.6
3	2.7	2.7	--	1.1	--	1.1	1.3	2.0	8.9	4.0	41.0	6.4	47.4
4	--	--	--	3.5	3.5	--	--	1.3	3.7	7.1	41.5	10.1	51.6
5	--	--	--	6.5	4.0	2.5	--	--	6.0	10.0	51.2	46.8	98.0
6	--	--	--	2.8	2.8	--	4.5	6.9	57.8	17.2	185.6	101.6	287.2
7	1.7	--	1.7	5.5	3.7	1.8	14.6	11.6	126.4	--	380.6	128.3	508.9
8	--	--	--	8.4	8.4	--	1.2	1.2	48.3	--	145.7	60.5	206.2
9	--	--	--	8.9	8.6	.3	2.8	4.6	48.1	--	154.7	196.0	350.7
10	.8	.8	--	19.0	17.3	1.7	--	1.9	11.7	20.2	75.3	12.0	87.3
11	--	--	--	36.9	35.1	1.8	--	--	1.7	8.5	48.3	2.6	50.9
12	--	--	--	1.4	.3	1.1	13.0	3.0	104.3	--	290.8	191.9	482.7
13	--	--	--	4.2	4.2	--	--	.3	43.2	--	97.4	65.8	163.2
14	--	--	--	--	--	--	14.5	1.9	21.6	--	54.5	134.8	189.3
CITY TOTAL	5.2	3.5	1.7	113.5	100.3	13.2	106.5	72.5	675.0	80.2	2325.4	1325.0	3650.4

TABLE III-A

EXISTING LAND USE BY PLANNING UNIT

PLANNING UNIT	RESIDENTIAL		BUSINESS			SERVICE			TRANSPORTATION		
	TOTAL	SINGLE-FAMILY	TOTAL	RETAIL TRADE	WHOLESALE TRADE	TOTAL CONSUMER SERVICES	PROF. SERV.	BUS. SERV.	TOTAL	VEHICULAR	NON-VEHICULAR
A-1	47.9	47.9	.9	.9	--	.9	--	.9	--	--	--
A-2	8.3	8.3	--	--	--	--	--	--	--	--	--
A-3	4.7	4.7	21.9	1.2	20.7	--	--	--	--	--	--
A-4	17.7	17.7	1.3	1.3	--	.3	--	.1	--	--	--
A-5	17.8	17.8	4.8	2.8	2.0	4.1	--	.6	--	--	--
A-6	24.3	24.3	.8	.8	--	.3	--	.3	--	--	--
A-7	21.9	21.9	.1	.1	--	--	--	--	--	--	--
A-8	9.7	9.7	.1	.1	--	.1	--	.1	24.9	24.9	--
A-9	28.0	28.0	--	--	--	2.6	1.4	1.2	--	--	--
A-9A	.9	.9	--	--	--	--	--	--	--	--	--
A-10	17.3	17.3	.3	.3	--	6.4	6.4	--	--	--	--
A-11	57.7	57.7	1.8	.5	1.3	16.3	16.3	--	--	--	--
A-12	53.3	53.3	3.1	3.1	--	1.0	.6	.4	--	--	--
A-13	36.5	36.5	5.0	4.4	.6	--	--	--	--	--	--
A-14	27.7	27.7	--	--	--	--	--	--	--	--	--
FRINGE TOTAL	373.7	373.7	40.1	15.5	24.6	32.0	28.4	3.6	24.9	24.9	--
PLANNING AREA TOTAL	1534.4	1503.3	111.7	76.7	35.0	58.4	41.9	16.8	30.1	28.4	1.7

TABLE III-A (CONT'D.)

EXISTING LAND USE BY PLANNING UNIT

PLANNING UNIT	INDUSTRIAL		PUBLIC		SEMI- PUBLIC	STS. AND ALLEYS	R. R. R-O-W	STREAMS AND LAKES	TOTAL DEV. LAND	TOTAL VACANT LAND	TOTAL LAND
	TOTAL	MFG. SERV.	MFG.	SERV.							
A-1	.3	.3			2.2	21.5	--	3.0	76.7	512.0	588.7
A-2	8.3	--	8.3		1.2	20.4	--	53.2	92.6	361.8	454.4
A-3	--	--	--	--	--	9.4	--	.7	36.7	326.4	363.1
A-4	3.3	2.8	.5		1.9	10.6	--		35.4	121.0	156.4
A-5	--	--	--	--	--	28.9	--	2.6	58.2	88.3	146.5
A-6	1.0	1.0	--	--	28.6	17.1	--	8.4	80.5	683.2	763.7
A-7	--	--	--	--	14.4	32.0	121.2	1.5	191.1	538.1	729.2
A-8	--	--	--	--	--	3.4	--	5.2	43.7	689.4	734.0
A-9	7.5	--	7.5		6.5	38.6	--	8.7	91.9	448.7	540.6
A-9A	--	--	--	--	--	.7	--	--	1.6	12.9	14.5
A-10					5.6	31.2	--	4.0	64.8	438.5	503.3
A-11	2.0	--	2.0		.8	46.3	--	4.8	135.1	748.7	883.8
A-12	.4	.4			1.8	41.3	17.9	2.4	121.2	712.7	833.9
A-13	1.9	--	1.9		.3	17.6	2.2	--	63.5	765.3	828.8
A-14					16.5			2.1	46.3	314.9	361.2
FRINGE											
TOTAL	24.7	4.1	20.6		37.1	319.0	141.3	96.6	1139.3	6762.8	7902.1
PLANNING											
AREA TOTAL	138.2	104.4	33.8		109.6	994.0	221.5	110.4	3464.7	8087.8	11552.5

northeast of the central business district in planning unit #2, and to the southeast in planning unit #12. Under the present zoning ordinance there is only one residential district allowing for single-family, duplexes and multiple family dwellings. Naturally, any residential-type structure may locate in the residential district and not have to follow any pattern.

TABLE IV STRUCTURES BY DENSITY CLASSIFICATION

Planning Unit	Single-Family	Two-Family	Multi-Family	Total Structures
1	173	3	--	176
2	987	22	18	1,027
3	14	2	5	21
4	87	4	2	93
5	65	--	--	65
6	303	1	--	304
7	583	11	1	595
8	258	1	1	260
9	234	1	2	237
10	28	--	--	28
11	--	--	--	--
12	595	39	10	644
13	160	3	--	163
14	53	3	--	56
City Total	3,540	90	39	3,669
A1	99	--	--	99
A2	16	--	--	16
A3	6	--	--	6
A4	43	--	--	43
A5	39	--	--	39
A6	52	--	--	52
A7	21	--	--	21
A8	19	--	--	19
A9	47	--	--	47
A9(a)	2	--	--	2
A10	36	--	--	36
A11	96	--	--	96
A12	124	--	--	124
A13	88	--	--	88
A14	49	--	--	49
Fringe Area Total	737	--	--	737
Planning Area Total	4,277	90	39	4,40

Density

The quantity of anything per unit of volume or area is density. Density of population is a frequently encountered term in the residential land analysis. It refers to the average number of persons per unit of area -- usually families or dwellings per acre. The current stock of dwelling units (single-family, two-family and multi-family) shown on Table V were analyzed in terms of densities per net acre for the total planning area. (See page 22a).

There are approximately 3,882 residential dwelling units with an average of 3.3 dwelling units per acre within the City. Under the single-family, two-family and multi-family classification there are 3.1, 9.3, and 14.1 dwelling units per acre, respectively. Single-family densities range from 2.1 dwelling units per acre in planning unit #10 to 4.0 dwelling units per acre in area #12, the latter being mainly non-white residences in the Kingville area. The square feet per dwelling unit in each case ranges from 10,890 to 20,775. Two-family (or duplexes) range in density from 4.0 units per acre in area #9 to about 15.0 units per acre in area #4. The square footage ranges from 2,905 to 10,890 per dwelling unit. Multi-family densities range from 2.3 dwelling units per acre in area #9 to 26.7 dwellings per acre in area #3 -- the central business district.

According to the "Committee on Hygiene of Housing of the American Public Health Association," it is recommended that lots for single-family dwellings with public water and sewer be no smaller than 6,000 square feet. This would allow for densities of five to seven dwellings per net acre; however, under the single-family classification, the density is much lower in Albemarle. On the average, the net residential density is 3.1 dwelling units per net acre with 14,051 square feet per dwelling. This is much higher than the minimum standards. The Committee also mentions that the minimum recommended standard for two-family attached units is 4,000

TABLE V CURRENT STOCK OF DWELLING UNITS BY PLANNING UNIT WITH DENSITIES PER NET ACRE, 1963

PLANNING UNITS	SINGLE-FAMILY				TWO-FAMILY				MULTI-FAMILY				TOTAL D.U.'s	TOTAL ACRES	TOTAL DENSITY PER NET ACRE
	DWELL- ING UNITS	ACRES	DENS. PER ACRE	DWELL- ING UNITS	ACRES	DENS. PER ACRE	DWELL- ING UNITS	ACRES	DENS. PER ACRE	DWELL- ING UNITS	ACRES	DENS. PER ACRE			
1	173	64.5	2.7	6	.8	7.5	--	--	--	--	--	--	179	65.3	2.7
2	988	343.6	2.9	44	3.7	11.9	78	3.5	22.3	32	1.2	26.7	1110	350.8	3.2
3 (CBD)	14	3.9	3.6	4	1.3	3.1	9	.4	22.5	9	.4	22.5	50	6.4	7.8
4	87	23.2	3.8	6	.4	15.0	--	--	--	--	--	--	102	24.0	4.2
5	65	19.6	3.3	--	--	--	--	--	--	--	--	--	65	19.6	3.3
6	303	94.8	3.2	2	.3	6.7	--	--	--	--	--	--	305	95.1	3.2
7	583	200.5	2.9	22	1.8	12.2	3	.6	5.0	4	.2	20.0	608	202.9	3.0
8	258	78.0	3.3	2	.3	6.7	7	3.1	2.3	7	3.1	2.3	264	78.5	3.4
9	234	80.9	2.9	2	.5	4	--	--	--	--	--	--	243	84.5	2.9
10	28	13.7	2.1	--	--	--	--	--	--	--	--	--	28	13.7	2.1
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	588	147.9	4.0	78	8.5	9.2	43	3.3	13.0	43	3.3	13.0	709	159.7	4.4
13	160	43.0	3.7	6	1.2	--	--	--	--	--	--	--	166	44.2	3.8
14	53	16.0	3.3	--	--	--	--	--	--	--	--	--	53	16.0	3.3
CITY TOTAL	3534	1129.6	3.1	172	18.8	9.3	176	12.3	14.1	3882	1160.7	3.3			
A 1	99	47.9	2.1							99	47.9	2.1			
A 2	16	8.3	1.9							16	8.3	1.9			
A 3	6	4.7	1.3							6	4.7	1.3			
A 4	43	17.7	2.4							43	17.7	2.4			
A 5	39	17.8	2.2							39	17.8	2.2			
A 6	52	24.3	2.1							52	24.3	2.1			
A 7	21	21.9	1.0							21	21.9	1.0			
A 8	19	9.7	1.9							19	9.7	1.9			
A 9	47	28.0	1.7							47	28.0	1.7			
A 9(A)	2	.9	2.2							2	.9	2.2			
A 10	36	17.3	2.1							36	17.3	2.1			
A 11	96	57.7	1.7							96	57.7	1.7			
A 12	124	53.3	2.3							124	53.3	2.3			
A 13	88	36.5	2.4							88	36.5	2.4			
A 14	49	27.7	1.8							49	27.7	1.8			
FRINGE TOTAL	737	373.7	2.0							737	373.7	2.0			
TOTAL PLANNING AREA	4271	1503.3	2.8	172	18.8	9.3	176	12.3	14.1	4619	1534.4	3.0			

square feet per dwelling unit (8,000 square feet for duplexes), or 10 to 12 dwelling units per net acre. Planning areas 2, 4, 7 and 12 are generally within this range, while areas 1, 3, 6, and 9 have a somewhat lower density per unit.

There are approximately 737 dwelling units averaging 2.0 dwelling units per acre, or 21,780 square feet per dwelling, within the fringe area. Recommended standards from the State Health Department indicate that the minimum lot size without public water or sewer is 20,000 square feet per dwelling unit. Overall densities within the fringe area appear to average out favorably with this standard. However, planning units A-4, A-5, A9(a), A-12, and A-13 are slightly below this standard as they average between 18,150 to 19,800 square feet per unit. Overall densities for the total planning area indicate a net density of 3.0 families per acre -- or 14,520 square feet per dwelling.

Housing Conditions

One of the most important characteristics of the housing supply in Albemarle is the quality of the housing -- and an important measure of the quality of the supply is their physical condition. The condition of housing considered jointly with such other characteristics as type, size, age and neighborhood provides the basis for a better understanding of the overall supply of housing, and for providing programs for rehabilitation or replacement.

During the land use survey, housing condition studies were made for Albemarle. This was done by analyzing each individual house within the total planning area. The "windshield" survey took into consideration mainly the physical aspects and not the environmental aspects of the town; however, such studies should be included if Albemarle were to consider some type of urban renewal project. During the survey each house was graded according to one of the following conditions:

Conserve: housing that is generally in good condition. Local codes and regulations (zoning, building, health and safety) must be enforced to keep these areas stable.

Minor Repair: housing that needs minor repairs to bring it up to par, e.g., painting, or porch, stair, and window frame repair. It can be repaired with a general neighborhood fix-up campaign.

Major Repair: housing that has started to deteriorate, usually has some major deficiencies, and needs extensive repair to upgrade. Examples of this type of repair are cracked foundations, walls out of plumb, and roofs in bad condition.

Dilapidated: housing that has reached a stage where it would not be economically feasible to repair. This housing should be condemned and razed.

Table VII summarizes the number of structures in the above conditions for each planning unit within the City and in the fringe area.

For the purpose of this study, Conserve and Minor Repair describe housing that is considered standard while Major Repair and Dilapidated housing (having some major deficiency) qualify as substandard housing. Table VIII illustrates the percentage of standard and substandard housing for each planning unit.

Within the City of Albemarle there are some 3,660 residential structures. Of this total, about 3,171 (or 86.5 per cent) are standard, while 495 (or 13.5 per cent) are substandard. The latter figure is exceptionally low when compared to other cities in North Carolina. (See Table VI).

The fringe area has approximately 737 structures, of which 650 (or slightly over 88 per cent) are standard and 87 (or 11.8 per cent) are substandard. Within the total planning area there is a total of 4,403 structures, of which 3,821 are standard, and 582 are substandard. These account for 86.8 per cent and 13.2 per cent, respectively.

TABLE VI ALBEMARLE COMPARED TO OTHER CITIES
IN PER CENT OF SUBSTANDARD HOUSING

City	Per Cent
Madison	33.0
Kings Mountain	32.3
Shelby	28.0
Monroe	18.6
Thomasville	17.5
Wilkesboro	15.7
ALBEMARLE	13.5

TABLE VII NUMBER OF STRUCTURES BY CLASSIFICATION - RESIDENTIAL

Planning Unit	Conserve		Minor Repair		Major Repair		Dilapidated		Total Structures	
	White	Non- White	White	Non- White	White	Non- White	White	Non- White	White	Non- White
1	86		76		13		1		176	
2	617		377		32		1		1,027	
3	4		15		2				21	
4	7		82		4				93	
5	5		58		2				65	
6	47		250		6		1		304	
7	51		428		107		9		595	
8	78		162		18		2		260	
9	90		131		10		6		237	
10	2		11		13		2		28	
12	65	16	166	165	10	178		44	241	403
13	31		99	1	12	13	6	1	148	15
14	19		32		2				53	
City Sub- Total	1,102	16	1,887	166	231	191	28	45	3,248	418
A-1	66		17		3		13		99	
A-2	10		2		1		3		16	
A-3	3		2		1				6	
A-4	33		4		2		4		43	
A-5	35		4						39	
A-6	46		3				3		52	
A-7	3		11		3		4		21	
A-8	16		1		1		1		19	
A-9	41		3				3		47	
A-9(a)			1		1				2	
A-10	26		2		5		3		36	
A-11	86		3		2		5		96	
A-12	98		15		4		7		124	
A-13	60		16		3		9		88	
A-14	38		5		2		4		49	
Fringe Area Sub- Total	561		89		28		59		737	
TOTAL	1,663	16	1,876	166	259	191	87	45	3,985	418

Map VI identifies the areas of substandard housing. A review of this map reveals that the major concentration of substandard housing is in planning unit 12 (Kingville area). Within this area out of a total of approximately 644 houses, 232 (or 36.0 per cent) are substandard. Referring to Table VII, 222 of these structures are non-white with only ten classified as white. As further documented on Map VI, only planning units 12 and 13 are occupied by non-white housing. Planning unit 12 contains approximately 403, while planning unit 13 has 15 -- accounting for 62.6 per cent and 9.2 per cent of the total houses in each area, respectively.

Smaller concentrations of substandard housing are spread generally around the City in smaller pockets. These areas are:

Planning Unit #13 - which has 32 substandard structures (19.6 per cent of the total planning unit). A majority of these substandard structures are located in the southwest corner of this planning unit in the general vicinity of Growell, Norton and Lincolnton, and Grove Streets.

Planning Unit #1 - which has approximately 176 structures, of which 14 (or 8.0 per cent) are substandard. These substandard structures are located mainly just west of the Fair Grounds on Lilly Street.

Planning Unit #2 - which has approximately 33 substandard structures (or 3.2 per cent of the total structures). Generally, these areas of substandard housing are located in the vicinity of Smith and East Canton Streets, and in the northwest corner of the planning unit between North First and North Second Streets just north of Chestnut Street.

Planning Unit #7 - which has substandard housing spread pretty much throughout the entire unit. Approximately 116 structures (or 19.5 per cent) out of a total of 595 are substandard.

Planning Unit #10 - which has approximately 28 structures with about 15 (or 53.6 per cent) substandard.

The above areas of blighted or substandard housing, particularly in planning unit 12, may be explained by the following reasons:

**AREAS OF SUB-STANDARD
&
NON-WHITE HOUSING**



**Albemarle
Planning Area**

3000' 0 3000'
Scale In Feet



LEGEND

— NON-WHITE NEIGHBORHOODS

■ AREAS WITH MOSTLY
SUB-STANDARD HOUSING

Building Deficiencies

1. Deteriorating conditions because of a defect not corrected through normal maintenance.
2. Inadequate original construction or alterations.
3. Inadequate or unsafe plumbing, heating, or electrical facilities.
4. Extensive minor defects which, taken collectively, are causing the building to have a deteriorating effect on the surrounding area.

Environmental Deficiencies

1. Overcrowding and improper location of structure on the land.
2. Conversion to incompatible types of uses (such as rooming houses) among family dwellings.
3. Unsafe, congested, poorly designed or otherwise deficient streets.
4. Detrimental land uses or conditions, such as incompatible uses, structures in mixed use, or adverse influences from noise, smoke, or fumes.

TABLE VIII

STANDARD AND SUBSTANDARD HOUSING BY
PLANNING UNIT AND WITH PERCENTAGE

Planning Unit	Total Structures	Standard Housing		Substandard Housing	
		Number	Per Cent	Number	Per Cent
1	176	162	92.0	14	8.0
2	1,027	994	96.8	33	3.2
3	21	19	90.5	2	9.5
4	93	89	95.7	4	4.3
5	65	63	96.9	2	3.1
6	304	297	97.7	7	2.3
7	595	479	80.5	116	19.5
8	260	240	92.3	20	7.7
9	237	221	93.3	16	6.7
10	28	13	46.4	15	53.6
11	--	--	--	--	--
12	644	412	64.0	232	36.0
13	163	131	80.4	32	19.6
14	53	51	96.2	2	3.8
<hr/>					
City Sub-Total	3,666	3,171	86.5	495	13.5
<hr/>					
A-1	99	83	83.8	16	16.2
A-2	16	12	75.0	4	25.0
A-3	6	5	83.3	1	16.7
A-4	43	37	86.0	6	14.0
A-5	39	39	100.0	--	--
A-6	52	49	94.2	3	5.8
A-7	21	14	60.7	7	33.3
A-8	19	17	89.5	2	10.5
A-9	47	44	93.6	3	6.4
A-9(a)	2	1	50.0	1	50.0
A-10	36	28	77.8	8	22.2
A-11	96	89	92.7	7	7.3
A-12	124	113	91.1	11	8.9
A-13	88	76	86.4	12	13.6
A-14	49	43	87.8	6	12.2
<hr/>					
Fringe Area Total	737	650	88.2	87	11.8
<hr/>					
Planning Area Total	4,403	3,821	86.8	582	13.2

Commercial

About 4.4 per cent of the developed land within the City is devoted to commercial uses. This accounts for 103.2 acres of land. In the average city commercial areas occupy about 2 to 5 per cent of the developed land.* Albemarle is within this range and would appear to have enough commercial land compared to the average city. Within the fringe area, there are about 97.0 acres being used for commercial uses. This comprises about 8.5 per cent of the developed land in the fringe area. About 5.8 per cent of the developed land is devoted to commercial uses within the total planning area. This accounts for 200.2 acres.

A breakdown of commercial uses in more detail includes Business, Services, and Transportation (vehicular and non-vehicular).

Business land uses are of two types -- retail and wholesale trade.

Retail Trade

Business land uses occupy some 71.6 acres within Albemarle, of which slightly over 61.0 acres are devoted to retail, or about 2.6 per cent of the developed land.

Within the fringe area retail trade occupies about 15.5 acres, or 1.4 per cent of the developed area. Within the total planning area business occupies 111.7 acres and 3.2 per cent of the developed land.

Planning Unit #3 -- the Central Business District (CBD) -- would, it appears, have the largest amount of land used for retail trade. However, this is not the case as planning unit 7 occupies some 13.4 acres -- slightly 3.3 more than the CBD. This may be explained in part by the strip development paralleling Concord Road. Planning units 1 and 13 show evidence of retail trade along East Main Street, just east of the Fork at Pee Dee Avenue and East Main Street. Within this area the retail trade consists of a department store, discount store, supermarket, etc. This area could develop into a very attractive

*Webster, Urban Planning and Municipal Public Policies, Harper and Brothers, 1958

neighborhood shopping center.

In the fringe area there is the ever-increasing demand for strip retail development to occur along the major highways. This is evident along Highway 27 in planning units 4 and 5 and north along Highway 52. The retail includes mainly gasoline stations, new and used car lots, and grocery stores.

Certain types of retail commercial need different locations from others. For example --

- Establishments that sell low bulk comparison and specialty items normally would locate in the CBD or in shopping centers (department stores and variety merchandise). These establishments are primary trade.
- Establishments selling one-stop shopping items, usually high bulk and more expensive than the primary trade, locate independently, separate or adjoining the CBD. These establishments are secondary trade.
- Establishments which are close at hand selling personal needs such as food and drugs are convenience trade.

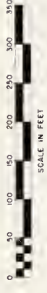
Map VII illustrates a detailed breakdown of the different land uses within the CBD. Land use problems in the CBD are running the full range -- inadequate off-street parking, land being used by residences that leave very little room for business expansion, uses that do not need a CBD location, and inefficient traffic circulation.

Wholesale Trade

Wholesale trade establishments sell commodities in large quantities to retailers. Naturally, it would appear that wholesaling trade should be located in close proximity to retail trade; however, this is not the case. About .5 per cent of the developed land within the City is devoted to wholesale uses -- slightly over ten acres. Planning unit 2 has about 4.2 acres of wholesale uses located near the Hospitable (gasoline distribution) and planning unit 13 has about .6 acres (Nehi Beverage Distribution). Bulk oil companies and a fertilizer outlet use 2.4 acres in planning unit 10. In the fringe area there are about 24.6 acres, or 2.1 per cent of the developed area. About 1 per cent of the developed land, or 35.0 acres, is devoted to wholesale within the total planning area.

ALBEMARLE, N.C.

CENTRAL BUSINESS DISTRICT



The Department of the City and County of Albemarle, North Carolina, has prepared this map for the purpose of showing the existing land use in the Central Business District of Albemarle, North Carolina, as of January 1, 1964.

EXISTING LAND USE

- PRIMARY TRADE
- SECONDARY TRADE
- CONVENIENCE TRADE
- CONSUMER SERVICES
- ADMINISTRATIVE,
FINANCIAL & ADVISORY
- SOCIAL & CULTURAL
- WHOLESALE & STORAGE
- REPAIR
- MANUFACTURING &
INDUSTRIAL SERVICES
- TRANSPORTATION
- RESIDENTIAL
- VACANT BUILDING

NORTH STREET

MAIN STREET

KING AVE.

SOUTH STREET

1st STREET

DEPOT
STREET

Again, there does not seem to be any logical location in wholesaling as it is rather spotted all over the City. There is a definite need for a closer proximity to retail trade.

Service

Services are divided into Consumer, Professional, and Business uses.

Approximately 26.4 acres, or 1.1 per cent of the developed land within the City, are devoted to services. Consumer services occupy about 13.5 acres (.6 per cent of the developed land). In the fringe area, professional services are non-existent. Most professional services need central locations - close to the central business district or near the center of the population densities. Consumer services occupy some 28.4 acres within the fringe area. This is higher than that within the City by almost 15 acres. The additional land in the fringe area is explained by the existence of two drive-in theaters in planning units 5 and 11, the fair grounds, and a go-cart track in planning unit 10. The total planning area uses about 58 acres, or 1.7 per cent of the developed area.

Services in the CBD currently use 4.1 acres, with professional uses occupying the largest portion - 2.0 acres. This leaves 1.7 and .4 acres for consumer and business services, respectively. Professional service also uses two acres located adjacent to the hospital and the CBD. Planning unit 7 uses the largest amount of land, about 2.7 acres, for business. Area 8 is second with 1.9 acres being used for a garage located near Long Creek and West Main Street. Services occupy a little over 16 acres in the fringe area. This includes the drive-in theaters and parts of the fair grounds.

Transportation

Transportation is divided into two categories -- vehicular and non-vehicular. Streets and railroads were not considered commercial uses and are analyzed under "Streets" and "Railroads."

Vehicular

Albemarle currently has only 3.5 acres devoted to vehicular transportation which account for .15 per cent of the developed land in the City. There are five times as many acres in the fringe area as are in the City -- about 25 acres -- in this category. This is because of the Albemarle Airport located in planning unit 7 covering 2.2 per cent of the developed fringe area. Approximately 30.1 acres, or .9 per cent of the developed area, are found in the total planning area.

The Central Business District (planning unit 3) has the largest proportion of land devoted to vehicular use (2.7 acres). This consists mainly of parking lots. Planning unit 10 uses approximately .8 acres for the bus depot.

Non-Vehicular

The power substations, located near the railroad in planning unit 7, occupy 1.7 acres.

Industrial

Manufacturing and manufacturing services (e.g., warehouses, junk yards) are the sub-categories under industry. Currently, 4.9 per cent of the developed land within the City is devoted to industrial uses. This accounts for 113.5 acres or 3.1 per cent of the total land area within the City.

Industrial land comprises 24.7 acres, or 2.2 per cent of the total developed land in the fringe area and includes a furniture plant, junk yards, construction company, and meat packing company located in planning units 4, 9, 2 and 6, respectively. In the total planning area, industrial land comprises 3.9 per cent of the developed land and covers 138.2

acres or 1.2 per cent of the total land.

It is a generally accepted rule of thumb that the average city devotes approximately ten to fifteen per cent of the total land to industrial uses.* This percentage range would also include railroad rights-of-way. In the case of Albemarle, 4.9 per cent of the developed land is used for industry; however, when the railroad rights-of-way are added to the percentage, industry occupies about 8.4 per cent of the developed land. According to the above average city range, Albemarle is still low at the minimum by about 39 acres, or 1.6 per cent.

The pattern of industry in Albemarle is characterized by corridors which were created by the early relation of industrial development to the railroad. Evidence of this development is noted in planning units 11, 10 and 5 and the eastern portion of unit 9, as well over 60 per cent of the industrial land is in this corridor. Individual manufacturing establishments are scattered throughout the entire planning area of Albemarle. They include --

- the vicinity of Montgomery and Smith Streets in planning unit 2;
- the vicinity of East Main and Badin Streets and also the vicinity of Coggins and East Main Streets in planning unit 13;
- the vicinity of Montgomery and Fourth Streets in planning unit 2;
- the area bounded by Popular and Monroe Streets in planning unit 7.

It is evident from the existing land use map that the intermixing of industrial locations and residential uses without adequate buffers, topography barriers, and the discouragement of industrial traffic through residential neighborhoods has brought about critical problems. Actually, these problems have been created by an inadequate zoning ordinance which spot-zoned industrial land

*Ibid

About 2.9 per cent of the developed area in the City is currently being used for semi-public uses. These uses occupy about 67.4 acres, or 1.8 per cent of the total city area. Semi-public land in the fringe area is approximately 50 per cent lower with 37 acres, or 3.3 per cent of the developed fringe land. A little over 104 acres, or 3.0 per cent of the total developed planning area, are occupied by semi-public uses.

YMCA	5.9 Acres
Wiscasset Ball Park	5.1 Acres
Scout Troops' Hut	1.7 Acres
Fairview Cemetery	16.6 Acres
Pee Dee and Seventh Street Cemetery	2.2 Acres
Stanly County Hospital	<u>14.3 Acres</u>
	45.8 Acres

The examples cited include nearly 50 per cent of the semi-public uses in Albemarle. The remaining percentage includes churches and fraternal uses.

Streets and Railroads

Probably no other land use in Albemarle's planning area is of more importance than that which is devoted to streets and railroads. No city could prosper without such means of transportation.

Streets occupy a high amount of land in Albemarle, second only to residential uses. About 29 per cent of the developed land in the City is devoted to streets (675 acres), or 18.5 per cent of the total land within the City. The fringe area has some 319 acres devoted to this use (3.3 per cent of the developed fringe area). Within the total planning area, 28.7 per cent of the developed area is devoted to streets (994 acres and slightly over 8 per cent of the total land in the planning area).

As a general rule, land used for streets within a city should not use more than 20 to 25 per cent of the developed

land. Albemarle's use of more land than is needed (approximately 4 to 9 per cent) may be explained by the following reasons:

Development is controlled by the traditional grid street pattern. Streets were laid out without taking advantage of the natural topography and drainage of the land.

Until recently the City did not have subdivision regulations controlling the length and width of blocks and overall street and subdivision design.

The City has not developed a comprehensive plan in which subdivision regulations are a tool of implementation; consequently, without a plan such as this, intelligent subdivision control is impossible.

Traffic Volumes

Traffic volume counts are of major importance in determining the amount of vehicles passing a certain point per day, and whether the streets are designed to carry such volumes. Map VIII illustrates the average daily 24-hour flow of traffic. The largest volumes of traffic are:

- just west of West Main Street near South First Street, with 10,200 vehicles passing per day;
- just north of Main Street on North First Street, with 9,200 vehicles passing per day;
- near Concord Avenue and West Main Street, with 9,700 vehicles passing per day;
- East Main Street near Mass Springs Road, with 6,300 vehicles passing per day;
- the full length of the Bypass, with a range of 2,350 to 2,600 vehicles per day.

The high traffic volumes, particularly within the central business district, can be attributed in part to --

AVERAGE DAILY TRAFFIC VOLUME

1962

Aldemarie Planning Area

3000' 0 3000'
Scale In Feet



CARS IN THOUSANDS



SOURCE BY N.C. HIGHWAY DEPT.

- the need for an outer-loop around the City to carry through traffic which has no destination in Albemarle; and
- the need for a better circulation system east and west through the City.

Since cities are generally self-sufficient, it is important that certain transportation facilities are provided for certain human wants. Among the most essential of these is the railroad. Railroads have played a big role in both the location and the development of cities.

Slightly over 80 acres, or 3.5 per cent of the developed land within Albemarle, are occupied by railroads. As a general rule, land devoted to railroad use in the average city is usually under five per cent of the developed land. Thus, Albemarle compares favorably with the average. The fringe area has approximately 141.3 acres used by railroads. This is 12.4 per cent of the developed fringe area -- much higher than that within the City; however, when combining the fringe area with the City, the percentage drops noticeably to 6.4 per cent.

Every community which is served by railway is generally faced with the problems created by railroad-highway crossings at grade level which cause inefficient railroad operation and public inconvenience. In many locations, Albemarle has alleviated this problem by separating highways and railroads at different levels. However, the following railway-highway crossings at the same level are still presenting problems:

Northwestern railroad crossing at West Main Street;
Winston-Salem railroad crossing at West Main Street;

The spare line off the Northwestern railroad crossing at North Second Street; and

the Northwestern railroad crossing at Snuggs Street.

Zoning Analysis

Many of Albemarle's land use problems are directly related to its inefficient zoning ordinance adopted in 1946. This zoning ordinance zoned areas arbitrarily without being based on some type of land development plan. Table IX details the use of land, how much land is actually zoned for each particular zone, how much is being used by that zone, and in today's light, how many uses other than what the zone was designed for are non-conforming uses. Following the table, Map IX portrays Albemarle's existing zoning districts. A review of this table and zoning map shows that approximately 2,881 net acres within Albemarle are zoned (excluding streets, railroads, and streams). In this total, 2,175 acres (75.5 per cent) are zoned for residential use, 285 acres (9.9 per cent) for commercial use, and 421 acres (14.6 per cent) industrial uses.

TABLE IX ANALYSIS OF EXISTING ZONING (IN NET ACRES)

DISTRICTS	TOTAL* LAND ZONED	% OF TOTAL CITY	NUMBER OF ACRES USED IN EACH ZONE							% OF TOTAL ZONED
			% OF RESIDEN- TIAL**	% OF TOTAL ZONED	% OF COMMER- CIAL***	% OF TOTAL ZONED	% OF INDUS- TRIAL	% OF TOTAL ZONED	% OF VACANT	
RESIDENTIAL	2175.0	75.5	1202.0	55.3	5.0	0.2	3.0	0.1	965.0	44.4
COMMERCIAL	285.0	9.9	73.0	25.6	90.0	31.6	8.0	2.8	114.0	40.0
INDUSTRIAL	421.0	14.6	64.0	15.2	8.0	2.0	102.0	24.2	247.0	58.6
TOTAL	2881.0	100.0	1339.0		103.0		113.0		1326.0	46.0

*EXCLUDING STREETS, RAILROAD RIGHTS-OF-WAY AND STREAMS.

**INCLUDING PUBLIC AND SEMI-PUBLIC LAND.

***COMBINED TOTAL OF BUSINESS, SERVICE, AND TRANSPORTATION.

It is obvious from the analysis that infringements in each zone by other uses are in evidence. Uses, whether they are commercial, industrial or residential may locate in either the industrial or commercial zones; consequently, those areas zoned for business or manufacturing will have less land available for future use since other uses can occupy these zones.

Overzoning also presents problems to a community. A reasonable amount of land should be available for expansion, but overzoning land for one particular use may infringe upon another. This is particularly true with "strip commercial" as the amount of land zoned for commercial triples that of the amount being used. This indicates that many existing commercial lots in Albemarle have unused or wasted land area. Further, such areas are normally not located or positioned so that future commercial developments can be adequately accommodated. Ribbon or strip development is inconvenient for customers and creates traffic problems. In most cases it lacks off-street parking. In addition, a good share of the area zoned for commercial is actually being used by residential (about 25 per cent). These mixed uses not only create undesirable residential areas, they also make it difficult to consolidate shopping areas. Consolidation of commercial areas is critically needed in Albemarle to stop the commercial sprawl along the major thoroughfares.

EXISTING ZONING



Albemarle Planning Area



LEGEND

- RESIDENTIAL
- COMMERCIAL
- BUSINESS
- NEIGHBORHOOD
- INDUSTRIAL

LAND USE COMPARISONS

Land uses in Albemarle compared with other cities depicts some interesting facts. Table X compares Albemarle to other cities in North Carolina in terms of per cent of developed land. Albemarle is second in the highest per cent of developed land in streets, below the average in commercial, industrial and public and semi-public land, but somewhat above the average in residential as well as streets.

COMPARISON OF ALBEMARLE WITH OTHER NORTH CAROLINA
TABLE X CITIES IN PER CENT OF DEVELOPED LAND

	Res.	Comm.	Indus. incl. R. R.	Public Semi- Public	Streets
ALBEMARLE	49.9	4.4	8.4	7.7	29.0
Elizabeth City	39.6	4.7	4.4	12.0	37.9
Monroe	43.1	5.4	14.0	8.3	29.0
Mount Airy	53.0	6.2	12.6	7.9	20.3
Salisbury	43.1	4.2	13.0	12.7	26.8
Thomasville	52.4	3.5	11.7	12.3	20.1
Average	46.8	4.7	10.6	10.2	27.2

The comparison shown in Table XI indicates that Albemarle is above the average in residential, commercial, industrial and streets but below the average in public and semi-public land. By rank, Albemarle is first in residential and streets, second in commercial and fourth in both public and semi-public and industrial.

TABLE XI COMPARISON OF ALBEMARLE WITH OTHER NORTH CAROLINA
CITIES IN LAND USE PER 100 PERSONS

	Res.	Comm.	Indus. incl. R. R.	Public, Semi Public	Streets
ALBEMARLE (12,261)	9.47	.84	1.58	1.46	5.51
Elizabeth City (13,805)	4.59	.52	.49	1.35	4.25
Monroe (10,882)	7.57	.99	2.57	1.54	5.27
Mount Airy (7,055)	7.61	.86	1.77	1.12	2.93
Salisbury (21,297)	6.44	.63	1.94	1.91	4.00
Thomasville (15,190)	8.34	.49	1.14	2.13	2.98
Average	7.35	.72	1.50	1.59	4.15

UTILITIES

The development of a community depends largely upon the adequacy of the utility system. If the community is to grow in an orderly fashion, various demands must be met in response to different land use needs. This part of the plan provides information about the existing water and sewerage system in Albemarle.

Sewerage System

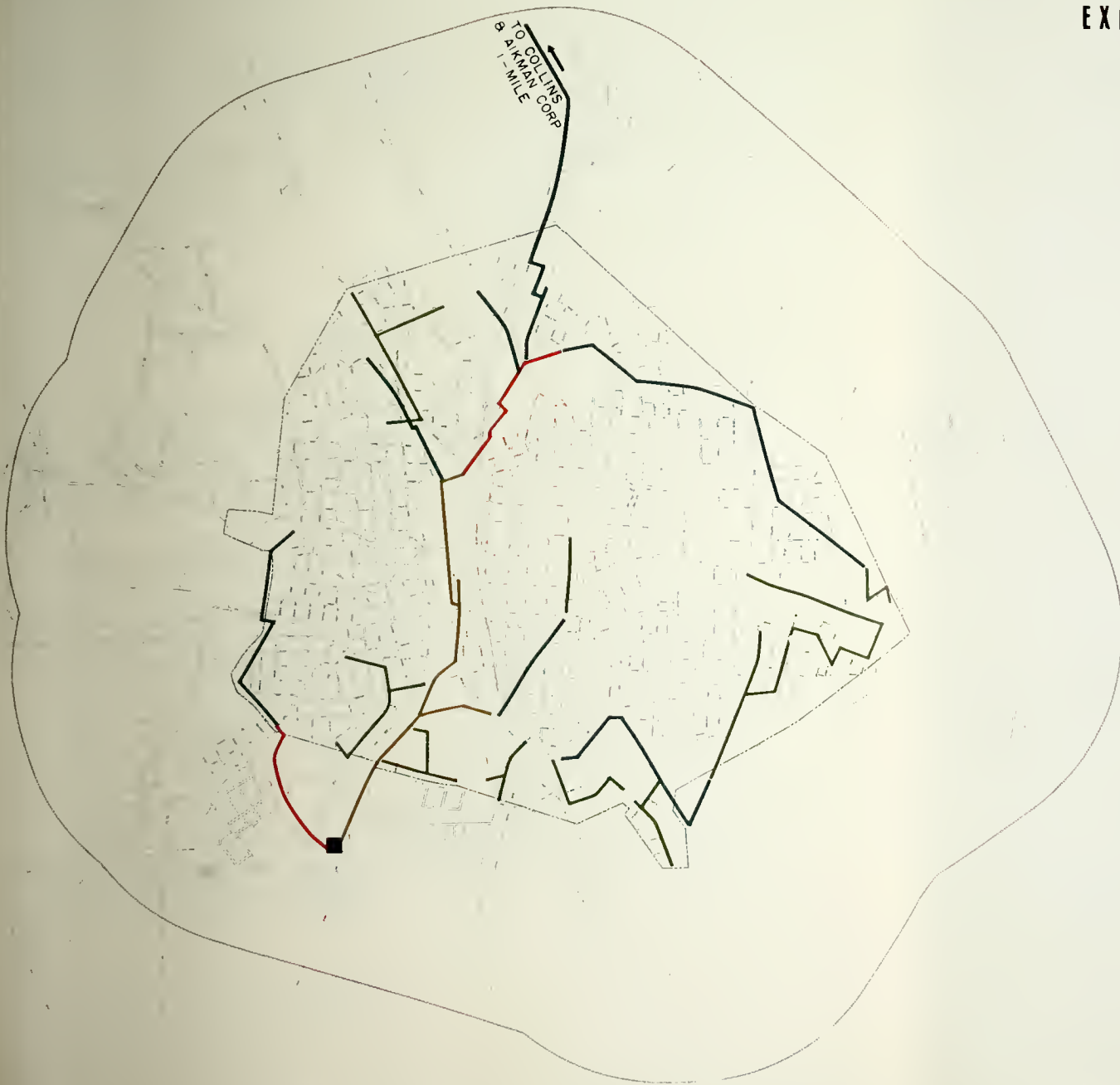
The sewerage treatment plan is located about one-half mile south of Albemarle on Coble Avenue extension. The plant is presently operating at an average of five million gallons per day with an ultimate capacity rated at eight million gallons per day. After the treatment process, effluent is discharged into Long Creek.

Following this page, Map X shows the existing sewerage system and indicates major trunk lines by size. Nearly all areas in Albemarle, including recent annexations, are served by sewer. Because of the ideal location of the sewerage treatment plant a majority of the one-mile area could be serviced easily on a gravity feed system. The City should consider servicing these areas in the future as the soil conditions are particularly inadequate for septic tanks. (See Map XX).

Water System

The Yadkin River, located approximately six miles north of the water treatment plant, is the main source of water. Long Creek is used as an auxiliary source and is located west of the City. The main treatment plant has an ultimate capacity of eight million gallons per day; the Long Creek plant has an ultimate capacity of two million gallons per day. All areas of the City, including recent annexations, are generally served

EXISTING SEWERAGE SYSTEM



Albemarle Planning Area






3000' 0 3000'

Scale in Feet



LEGEND

EXISTING

-  36"-24" LINES
-  20"-16" LINES
-  15"-12" LINES
-  10"-8" LINES
-  TREATMENT PLANT

by water. (See Map XI). The water treatment plant is not shown on this map as it is located approximately two miles north of Albemarle on Highway 52.

Some areas outside the City are also served by city water. This is particularly true along Highway 52 north of Albemarle and extending as far north as Pfeiffer College.

City officials feel that the present water treatment plant is adequate and will meet the needs of the people during the next twenty years.

MAJOR LAND USE PROBLEMS

Land use problems in Albemarle have been created in the past and present because of the lack of comprehensive planning, overall thoroughfare planning, and inadequate city controls. Some of the major land use problems are:

Strip and Ribbon Commercial Development

The present zoning ordinance, adopted in 1946, has allowed strip commercial use to develop paralleling the major streets in parts of Albemarle. This is extremely undesirable because it reduces the major street traffic-carrying capacities, has inadequate off-street parking, increases hazards to traffic safety, and increases commercial blight with decreased property values. Strip commercial development is evident from the CBD out West Main Street and Concord Avenue to the city limits; along U. S. 52 from Chestnut Street north to the city limits; along East Main Street from Arey Avenue to Berry Avenue; and south of the CBD along the Norwood Highway. Future zoning and land use planning must eliminate strip commercial development. Strip commercial areas must be consolidated into areas where it is economically feasible.

EXISTING WATER SYSTEM



Albemarle Planning Area



LEGEND

EXISTING

- 20" LINES
- 16"-14" LINES
- 12"-10" LINES
- 8"-6" LINES
- ELEVATED TANK
- TREATMENT PLANT

Substandard Housing

Housing conditions in part of planning area 12 are at a point that warrants clearance. The necessary means for this action, such as urban renewal or private action, should be considered.

Industrial Area

The intermixture of land uses within the industrial area are a significant problem in Albemarle. Zoning has not prevented non-industrial uses from locating in the industrial districts. In some cases industrial districts have been poorly located. This is true in planning area 2 near Montgomery Street and Smith Street; in area 12 in the vicinity of Arey Avenue and Lundix Street; and in area 7 near Walnut and Monroe Streets. Future zoning should gradually eliminate non-industrial uses from industrial areas and locate industrial areas near major streets and railroads.

Residential Areas

There is only one residential area in Albemarle that allows for single-family, duplexes and apartments all in the same district. This is a great problem because densities cannot be determined for future uses such as school capacities and utilities. Future zoning should provide for different residential districts so that densities can be determined for certain needs.

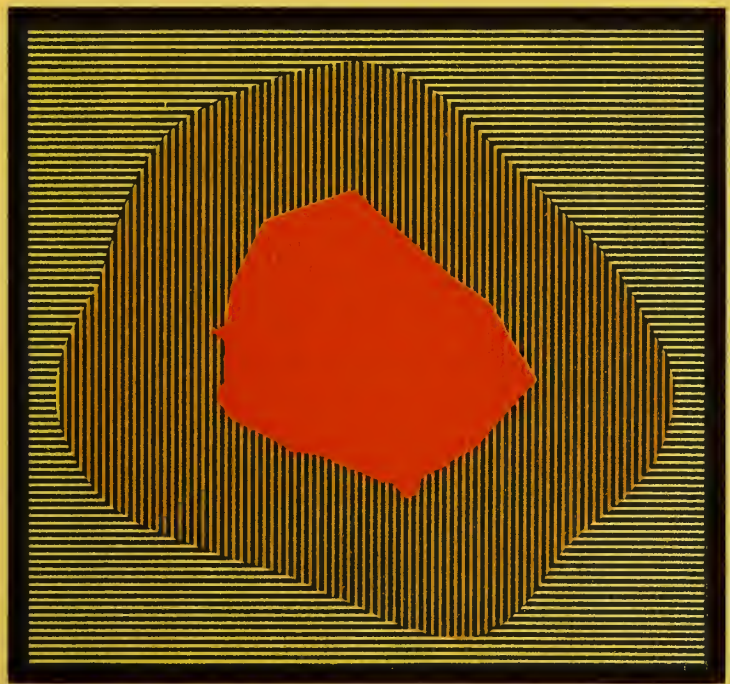
Streets

Because of the lack of subdivision regulations and overall street planning many of the platted streets have resulted in poor design, dead-ends, and inadequate circulation patterns. Most of the City's street systems do not have an adequate relationship to the school and neighborhood. Major streets should not penetrate the neighborhood or pass near elementary schools and playgrounds. There is also the need for an outer-loop around the City to relieve congestion in the CBD.

Central Business District

This area has several residential and certain commercial uses which do not need such a location. Future zoning should consider a separate Central Business District zone and General Commercial zone. Such problems as off-street parking and circulation will be analyzed in a separate study entitled CBD Plan, Albemarle, North Carolina.

FUTURE LAND USE





FUTURE LAND USE

People are the reason for the development of cities; people are also the reason for the development of plans. A study of people, their desires, habits, social traits, and their use of the natural resources of the land and the relationship of these land uses to each other are controlling factors in developing the future use of land in Albemarle.

In formulating the proposals for the future use of land it was paramount that the plan insured a compatible and harmonious relationship between the various uses of land as they are developed for various community needs. The following patterns proposed within the plan were generally considered compatible:

GROUP I

Residential - with densities ranging from 1 to 13 dwelling units per net acre.

Semi-Public - churches, cemeteries and institutional uses.

Public - including schools (elementary and secondary), colleges, fire stations, libraries and related facilities.

Controlled Utilities - sewerage and water supply.

Agricultural

Parking

GROUP II

Commercial

Office and Financial - professional and commercial offices and banks.

Service Uses - barber shops, laundromat, etc.

Utilities

Parking

GROUP III
Light Industrial
Warehousing
Utilities
Railroads
Parking

GROUP IV
Heavy Industrial
Open Uses
Parking

All land uses are not always compatible or harmonious with each other. There is a need to establish a gradation or transition of land uses gradually bridging the interval from a higher to a lower land use relationship. In developing the future land use proposals outlined in this section of the Land Development Plan, the following transition of land uses, indicated on Map XII A and B were used:

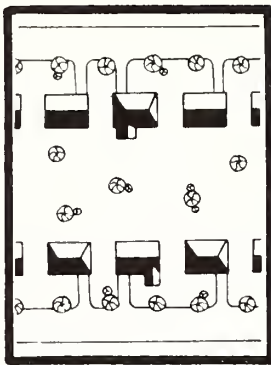
GRADIENT GROUP I
Single-Family
Multiple Family
Commercial

GRADIENT GROUP II
Single-Family
Offices - doctor, lawyers, etc.
Commercial

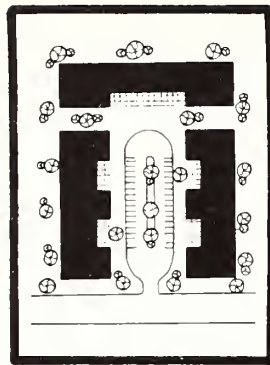
GRADIENT GROUP III
Single-Family
Multiple Family
Open Space - parks, etc.
Heavy Industrial

GRADIENT GROUP IV
Single-Family
Multiple Family
Commercial
Light Industrial

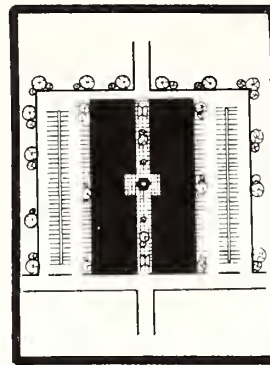
GRADIENT GROUP I



SINGLE FAMILY

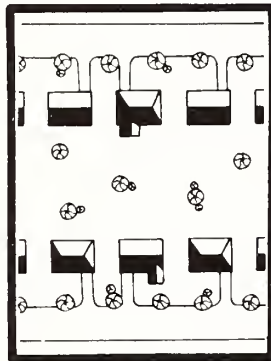


MULTIPLE FAMILY

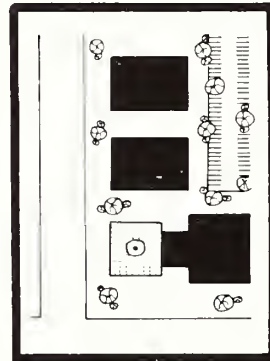


COMMERCIAL

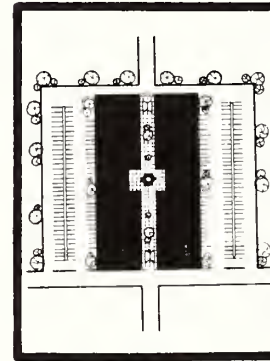
GRADIENT GROUP II



SINGLE FAMILY

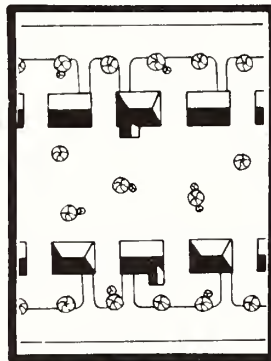


OFFICE

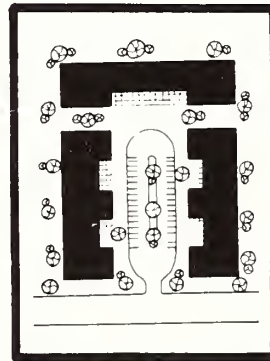


COMMERCIAL

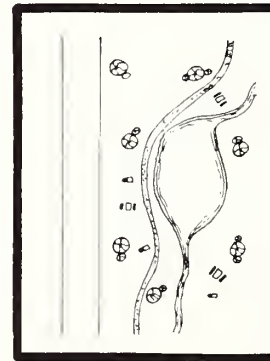
GRADIENT GROUP III



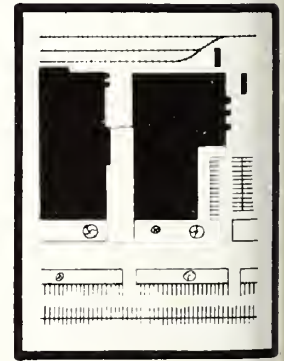
SINGLE FAMILY



MULTIPLE FAMILY

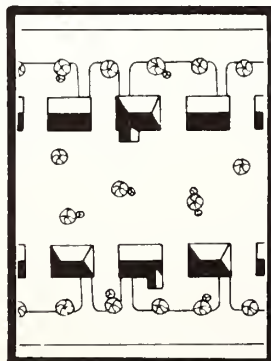


OPEN

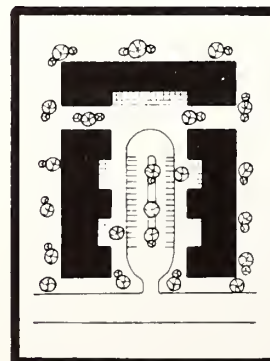


HEAVY INDUSTRIAL

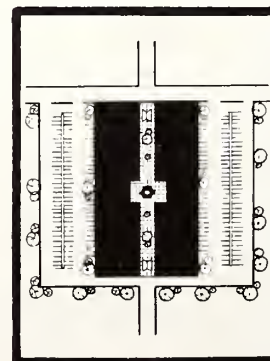
GRADIENT GROUP IV



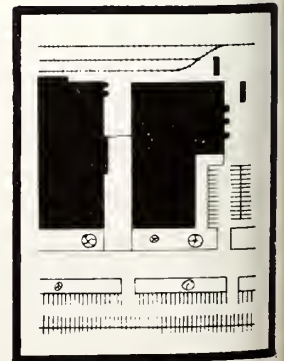
SINGLE FAMILY



MULTIPLE FAMILY



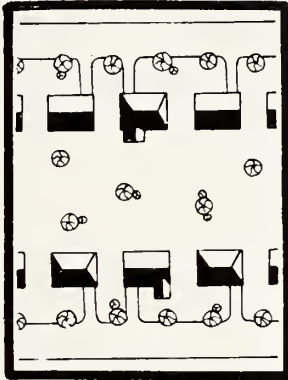
COMMERCIAL



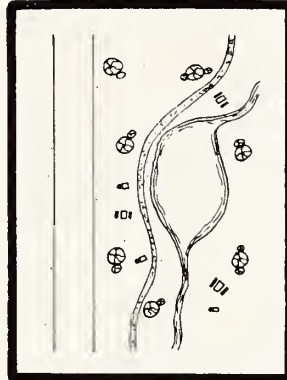
LIGHT INDUSTRIAL

Land Use Transitions

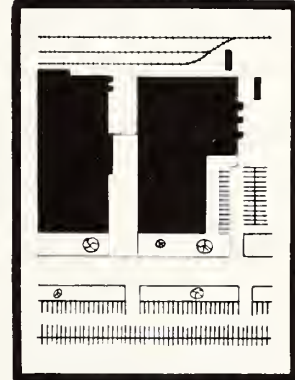
GRADIENT GROUP V



SINGLE FAMILY

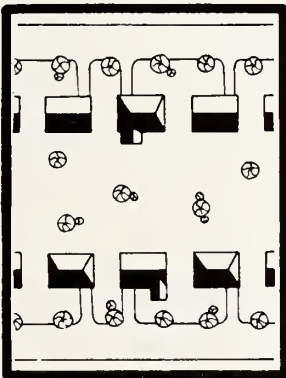


OPEN

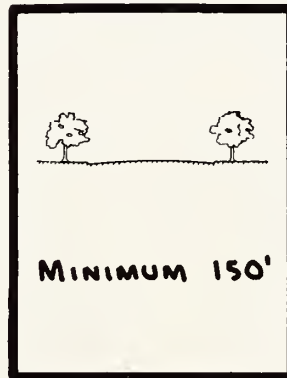


LIGHT INDUSTRIAL

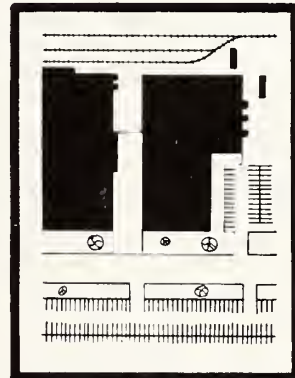
GRADIENT GROUP VI



SINGLE FAMILY

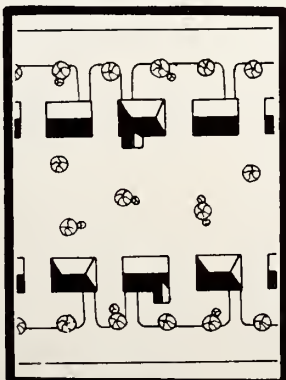


RIGHT-OF-WAY



LIGHT INDUSTRIAL

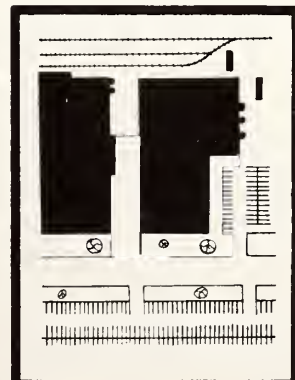
GRADIENT GROUP VII



SINGLE FAMILY



TOPOGRAPHY



LIGHT INDUSTRIAL

GRADIENT GROUP V

Single-Family

Open Space - parks, etc.

Light Industrial

GRADIENT GROUP VI

Single-Family

Right-of-Way (minimum 150 feet.

Light Industrial

GRADIENT GROUP VII

Single-Family

Topography - grade separations in the land.

Light Industrial

The Planning Board should use these transitions of land uses when reviewing developers' proposals for any special use. In this manner it will be possible to gradually implement the future land use proposals set forth in the plan.

This portion of the Land Development Plan will formulate proposals for the future use of land based on the overall planning objectives, principles and land use projections. This will include the industrial development, commercial development, residential development, the community facilities plan, the utility plan and the circulation plan. The Land Development Plan is shown on Map XIII.

LAND DEVELOPMENT AND SKETCH THOROUGHFARE PLAN

Albemarle Planning Area



LEGEND

- RESIDENTIAL
- LOW DENSITY
- MEDIUM LOW DENSITY
- MEDIUM DENSITY
- HIGH DENSITY
- COMMERCIAL
- SHOPPING CENTER
- FREE STANDING
- INDUSTRIAL
- SEMI-PUBLIC
- PUBLIC

- E ELEM. SCHOOL
- J JR. HIGH SCHOOL
- H SR. HIGH SCHOOL
- P PARKS
- S SEWAGE TREATMENT PLANT
- F FIRE STATION
- △ PROPOSED FACILITIES

- THOROUGHFARE
- EXISTING MAJOR
- PROPOSED MAJOR
- COLLECTOR STREETS
- PROPOSED BRIDGES



INDUSTRIAL DEVELOPMENT

The objective of the industrial section of the plan is to provide a variety and range of industrial sites so that it is economically feasible to manufacture and provide goods, services and employment in areas that are attractive, convenient and safe. The land should be suitably located so that industrial growth can continue to benefit both industry and the community. It is essential that future industrial development recognizes a balance between durable and non-durable industries in the most favorable ratio. The current emphasis on non-durables will continue to produce undesirable influences in the economy, particularly during periods of economic recessions.

In developing the industrial portion of the plan, the following principles were considered.

Access

Industry no longer accepts inaccessible sites reached through narrow residential streets; therefore, new sites should be located where they will have convenient access to railroads and/or major arterial streets. Whenever possible, such areas should be located between railroad and arterial streets.

Site Characteristics

Reasonably level land with good drainage is desirable, preferably with not more than 5% slope, and capable of being graded without undue expense. Irregular sites with projections, indentations and acute angles should be avoided.

Dispersal

Industrial districts should be located in various areas of the city and the one-mile perimeter to reduce the cost and time of travel as well as to spread peak-hour traffic loads over many thoroughfares. However, industrial activities should be well grouped rather than scattered randomly.

Off-Street Parking, Loading and Unloading Space

Areas should be large enough to provide off-street parking for employees and should include off-street maneuvering space for loading and unloading of materials.

Utilities

Power, water and waste disposal facilities should be available at or near the site.

Buffer Planting Strip

Industrial areas should be separated from residential areas by the use of planted buffer strips (such as trees), transition of land uses, or by the natural topography of the land.

Favorable Zoning

By proper zoning principles, industrial and residential areas can become better neighbors.

Industrial Survey

As a prerequisite to the industrial development portion of the plan, it was necessary to make a survey of all manufacturing industries currently located in the City of Albemarle and the one-mile perimeter. This was done by mailing an industrial questionnaire to all manufacturing industries. From those returned, standards were established in relation to employment, land area, topography and drainage of the area, parking, loading and unloading facilities, square footage of building area, rail and highway access and other physical considerations. In many cases on-the-site surveys were necessary to determine actually needed requirements. Tabulation and results of the 19 manufacturing industries studied are illustrated on Table XII.

Industry	No. of Indus.	Existing		Desired		Access		Source Raw Mats.	Market			
		Empls.	Site Acres	Empls.* per Acre	Bldg. in Sq.Ft.	Site Acres	Empls. per Acre			Bldg. in Sq.Ft.	Exist.	Des.
Durables:												
Lumber and Wood Prod.	1	35	1	35	11,000	4	9	20,000	T	N. C.	East. Seabd.	
	2	115	1	115	--	3	38	--	T	--	---	
	3	38	7	6	26,325	--	--	--	T&R	Local	50-60	
	4	15	5	3	--	--	--	--	T&R	Local	miles	
Other Durables	1	16	5	3	18,000	--	--	--	T&R	N. C.	N. C.	
	2	12	1	12	--	--	--	--	T&R	--	---	
	3	37	5	8	--	--	--	--	T&R	--	---	
Non-Durables:												
Textiles	1	21	.5	40	1,000	3	7	6,000	T	S. E. USA	N. Y.	
	2	98	2.8	14	30,000	--	--	--	T&R	--	---	
	3	730	19	17	415,000	--	--	--	T&R	W & S	USA	
	4	75	7.7	5	21,000	--	--	33,800	T	--	N. C.	
	5	1800	30	60	--	--	--	--	T&R	--	USA	
Apparel and Other Fabri- cating Textiles	1	145	2.3	50	35,000	--	--	--	T&R	Local	USA	
	2	62	1	40	22,500	2	20	--	T	--	USA	
	3	230	6	28	32,000	--	--	40,000		Local	USA	
	4	1200	7.5	100	--	--	--	--	T&R	--	USA	
Foods and Kindred Products	1	29	2	15	15,000	--	--	--	T	Local	75 mi.	
	2	143	3	33	15,000	--	--	--	T	R	Out of State 60mi.	
	3	19	1.5	12	15,000	--	--	--	T	Stanly County		

*Based on employment at largest shift.

**Land needed for present or anticipated operation.

*** R=Rail; T=Truck.

It was possible to derive an existing and desired employees per acre figure (as indicated in Table XIII) and then transfer these desired ratios into a projected net acres needed by 1985. Included in the manufacturing survey were figures indicating employment trends dating back to 1946 (post-war years) or from the time the industry started operations in Albemarle. After the annual employment figures were collected it was then possible, by use of the least square method, to make future manufacturing employment projections to 1975 and 1985. Table XIV and Chart I classify industry under two categories -- Durables and Non-Durables. "Durable" industries refer to establishments manufacturing tangible goods which are likely to have utility for a long period of time, e.g., lumber and wood products. "Non-Durables" manufacture goods which will be consumed with one use or in a relatively short period of time, e.g., textiles, food and kindred products. Map XIV designates the major manufacturing employment center in Albemarle as either one.

TABLE XIII NET MANUFACTURING DENSITIES PER ACRE
(Based on Industrial Survey)

<u>INDUSTRY</u>	<u>EMPLOYEES PER ACRE</u>
Durables:	
Lumber and Wood Products	14
Other Durables	8
Non-Durables:	
Textiles	21
Apparel and Other Fabricating Textiles	30
Food and Kindred Products	20

MAJOR INDUSTRIAL CENTERS OF EMPLOYMENT



Albemarle
Planning Area

3000' 0 3000'

Scale in Feet



LEGEND

DURABLE NON-DURABLE



UNDER 100

100 - 500

501 - 1000

1001 - 1500

OVER 1500

TABLE XIV

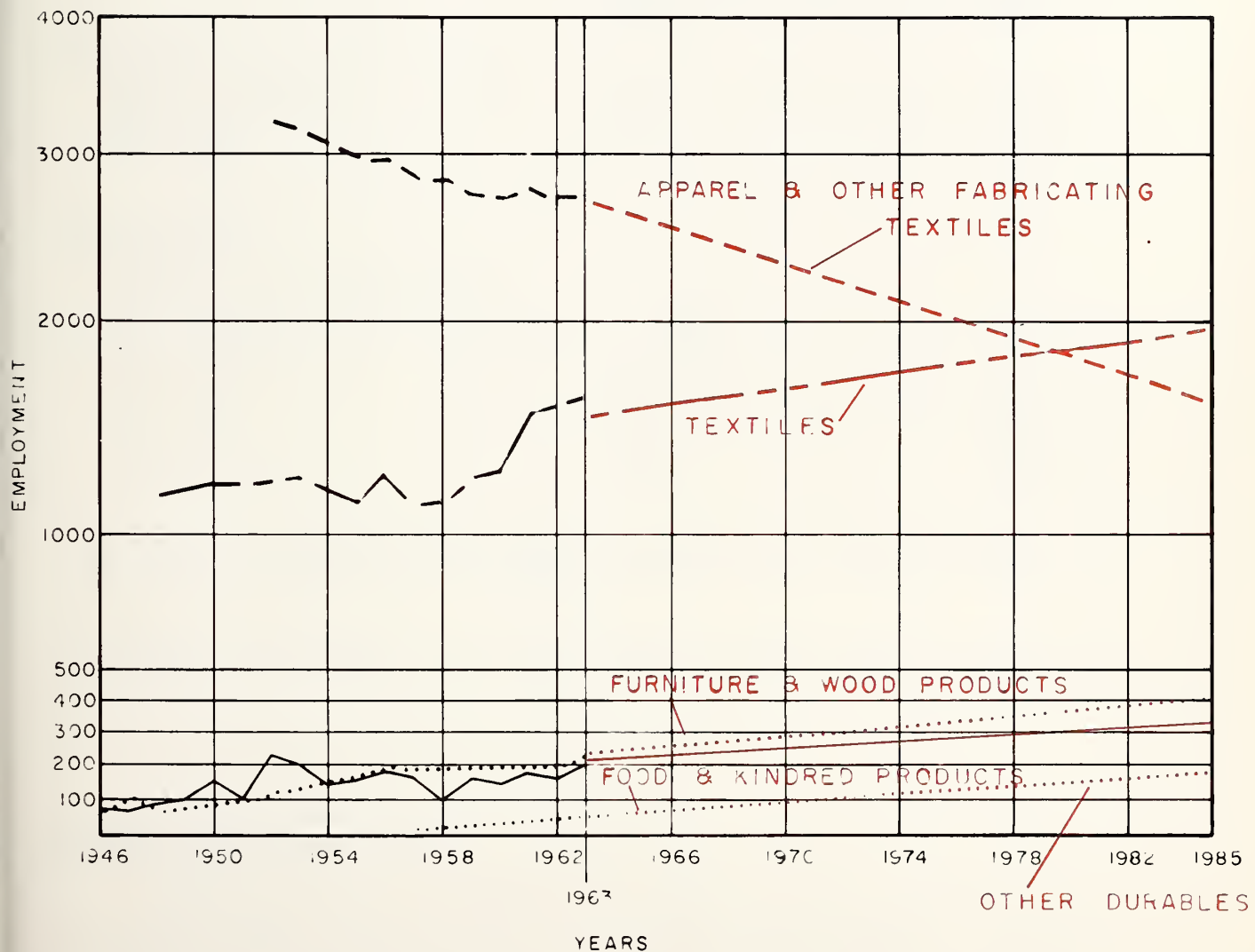
MANUFACTURING EMPLOYMENT
(Projected by Least Square Method)

	1963	1975	1985
Durables:			
Lumber and Wood Products	203	320	410
Other Durables	65	120	190
Sub-Total	268	440	600
Non-Durables:			
Textiles	2,724	2,060	1,600
Apparel and Other Fabricating Textiles	1,637	1,770	1,960
Food and Kindred Products	191	270	330
Sub-Total	4,552	4,100	3,890
Total	4,820	4,540	4,490

Industrial Land Use Requirements

Based on the manufacturing employment projection to 1985, calculations were made to determine the needed amount of industrial land in Albemarle by 1985. This was done by applying the desired ratio of employees per acre (as shown in Table XIII) to the projected employment for each industrial classification. The results of this tabulation are illustrated in Table XV. To illustrate: the projected employment to 1985 of "Apparel and Other Fabricating Textiles" estimates 1,960 employees. Applied to the net density of 30 employees per acre (Table XIII), a projected need of 65 acres by 1985 is indicated. The overall projection for both durables and non-durables industries indicates that by 1985 Albemarle will need approximately 469 gross acres (streets and railroad rights-of-way included) of industrial land. Consequently, the industrial portion of the plan proposed an additional 111 acres for future industrial development. It is important to note that more land than the proposed

DURABLES AND NON-DURABLES EMPLOYMENT



111 acres have been set aside within the planning area. This is to allow for flexibility in future development, the best balance of land uses to each other, and a selection of a variety of sites.

TABLE XV NET MANUFACTURING LAND USES IN ACRES
(Projected by Least Square Method)

	1963	1985
Durables:		
Lumber and Wood Products	14	30
Other Durables	10	21
Sub-Total	24	51
Non-Durables:		
Textiles	60	76
Apparel and Fabricating		
Textiles	16.5	65
Food and Kindred Products	6.5	17
Sub-Total	83	158
Net Total	107	209
Gross Total	358 ¹	469 ²

¹ Includes 221 acres in railroad rights-of-way and 30 acres in street rights-of-way.

² Includes 221 acres in railroad rights-of-way and 39 acres in street rights-of-way.

Planned Industrial Areas

Certain areas throughout the city and the one-mile perimeter have been proposed for industrial development. The proposals were based on certain industrial site and location requirements and new advancement in the field of industrial technology. Map XV indicates those areas previously assigned to industrial use and development and Map XV-B shows those areas proposed during the planning period of the plan. Several



Albemarle
Planning Area

Scale in Feet

3000' 0 3000'

NORTH

EXISTING AREAS OF
INDUSTRIAL DEVELOPMENT

PROPOSED AREA OF
INDUSTRIAL DEVELOPMENT



Albemarle
Planning Area



MAP-15B

areas throughout the older parts of the community currently existing in non-industrial uses are indicated in the latter map as proposed for conversion to industrial uses by either private action or public redevelopment.

The following areas have been proposed for industrial development within the scope of the plan.

Within the City

A 400-450 acre industrial corridor complex running the full length of the city contiguous to the railroad has been proposed. Some areas are currently developed, but for the most part plenty of land is available for the expansion of new and existing development. All utilities are available or nearby, and there is access to both rail and truck routes.

A 20-acre site to the west of the City on Concord Road has also been proposed. This site is partially developed with land available for expansion and possible new industrial growth. This site has utilities and access to truck routes.

In the Fringe Area

An airport industrial complex containing approximately 160 acres or more located in the vicinity of the existing airport has been proposed. This area has an approximate overall slope of 5 to 6% with utilities nearby and the Bypass for truck access.

A 70-acre industrial complex in the vicinity of the existing treatment plant has been proposed. This area is partially occupied by the State Highway and County Prison; however, land is available for new development. Utilities are nearby with the Bypass available for trucks.

A 50-acre site currently vacant and bounded by West Main Street and Long Creek and the proposed outer loop has been proposed. This site has an excellent location as it is buffered to the east from residential development by the natural topography of the land and Long Creek. The site is reasonably level with utilities nearby and highway access proposed.

It is recommended that, if possible, an "organized industrial district" be developed within those areas designed in the plan. An "organized industrial district" is defined as a tract of land which is subdivided and developed according to a comprehensive plan for the use of a community of industries, with streets, railroad tracks, and utilities installed before sites are sold to prospective occupants. It is important that the comprehensive plan for an "organized industrial district" be adequate in controlling the area and buildings through restrictions and zoning, with a view to protect the investment of both developers of the district and industries occupying the improved sites. Greensboro, North Carolina, has such an industrial district organized. Possibly the City of Albemarle could look into some type of modified form such as this -- but on a smaller scale.

Industries with Growth Potential and Those Needing Stabilization

In analyzing Chart I and Table XV it can be easily recognized that some industries are growing very rapidly in terms of employment while others are witnessing a decrease -- namely textiles. This is not to say that the textile industries are decreasing in productivity, but rather, because of automation, are producing more products with fewer people than ever before; however, it is imperative to point out that in the last decade the employment rate of this industry decreased by nearly 15% in Albemarle. If nothing is done to curtail the employment problem, it is projected that by 1985 it will have decreased even farther to 40%.

Projections indicate that the following industries are experiencing employment growth and will contribute to the long-range stability of the economy:

- Food and kindred products
- Apparel and other fabricating textiles
- Lumber and wood products
- Other durables

Since Albemarle is not currently blessed with a diversity of industries, it is recommended that desirable categories be encouraged in the "Durables" industry in order to stabilize the economy to the fullest extent. The following is a list of new and different industries that Albemarle might want to consider:

- Fabricating metals (Durable)
- Electrical machinery (Durable)
- Machinery (excluding electrical) (Durable)
- Primary metals (Durable)
- Chemicals and allied products (Non-Durable)

In attracting new industry, Albemarle might want to consider the following criteria:

1. Is the industry stable in that the market for its product does not fluctuate greatly with the business cycle?
2. Is the business of a seasonal character resulting in seasonal employment?
3. What would be the effect upon the community if the industry should fail?
4. Is it likely that any workers will be brought in to meet the labor demands and, if so, what kind of people will they be, and how will this affect the original character of the community?
5. Will it add revenues directly or indirectly, compensating the community for the required expansion of public services and additional operating expense of municipal operations?
6. If the public revenues are not increased, can the community afford to provide the additional facilities and services required by the location of the industry?
7. Is the community in a position to make adequate provisions for the transportation, labor, power, water supply, and other requirements which will be demanded, as a result of industrial growth?

COMMERCIAL DEVELOPMENT

The objective of the commercial portion of the plan is to locate commercial activities so that it is economically feasible to operate a business and provide goods and services to the community in a clear, attractive, safe, and convenient manner, thereby:

- Protecting the investments of existing and future commercial concentrations through the application of sound planning principles;
- protecting residential neighborhoods from depreciation of property values resulting from commercial over-zoning and from over-development or intrusion of undesirable commercial uses;
- encouraging the improvement of major street traffic capacities through the proper location of commercial areas.

The commercial development section of the plan includes the full range of activities -- wholesale, retail and services; goods and services from processing to distribution to merchandising. The problem of developing the commercial portion of the plan was complicated by the ever-increasing pressure of strip or ribbon commercial development.

Detailed analysis of commercial development within the City indicates that in 1963 the City was zoned in excess of 187 acres (mostly strip or ribbon development) -- of which 114 acres were vacant and 73 acres were used for residential uses. It is the goal of the plan to consolidate into compact areas those areas that are economical and feasible to operate, offering the possibility of one-stop shopping and including adequate parking and efficient traffic flow.

In this plan enough land has been designated for commercial purposes to allow ample freedom of choice; however, care has been taken to avoid designating such uneconomically large

or numerous areas (including string or ribbon development along major streets) as to result in scattered, isolated establishments permanently vacant.

Shopping Centers

The following criteria were utilized in preparing the proposals for shopping centers:

Neighborhood Shopping Center: provides for the sale of convenient goods (foods, drugs and sundries) and personal services (laundry and laundromats, barber shops, shoe repair) for day-to-day household needs of several neighborhoods. The principal tenant of such a center is the supermarket. The neighborhood center needs a 4-10-acre site area to serve at least 1,000 families and be located generally within a 3/4-mile radius.

Community Shopping Center: provides the same type of services as the neighborhood center but is expanded to include "comparison shopping goods," for the sale of soft lines (wearing apparel for men, women and children) and hard lines (hardware and appliances). It makes more depth of merchandise available in a variety of sizes, styles, colors, and prices. It is built around a junior department store or a variety store as the principal tenant (in addition to the supermarket). For its site area the community center needs from 10 to 30 acres or more to serve at least 9,000 families.

Regional Shopping Center: provides a service similar to the community shopping center but has a greater depth of variety. It is built around a full-line department store as the major drawing power. Generally, for greater depth and variety in comparative shopping, two or even three department stores may be included within the center. Because of this characteristic customer drawing power is based on the capacity to offer complete shopping facilities. This attraction extends its trade area by 10 to 14 miles or so, modified by the factors of competitive facilities, travel time (convenience) and access to highways.

The regional shopping center is the largest type -- and would be comparable to the Albemarle Central Business District.

Shopping Center Proposals

Central Business District (Regional Shopping Center, Modified)

Albemarle's central business district (or regional shopping center) has regional strength, but to capitalize on its strong regional position it must promote its shopping advantages and make certain physical improvements. Creating order, attractive modernized buildings, stronger merchandising units, related and attractive parking facilities, improved transportation and adequate circulation will give the proposed center its heaviest weapon in competition for the customers' dollars.

It is not the intent of the Land Development Plan to develop a detailed "Central Business District Plan"; rather, it is the goal of the plan to indicate just the broad, general framework proposals of the center including circulation within which the detailed plan will coincide. This detailed "Central Business District Plan" will be developed at a later date.

The following principles were used in developing the overall proposals for the regional shopping center:

- easy access into, within and out of the regional center with the minimum of interference;
- loop circulation around the regional center and the lessening of through traffic;
- new off-street parking facilities near the periphery of the central core;
- possible development of a modified mall or plaza as a means of separating pedestrian and automobile traffic.

Within the regional center approximately 40 gross acres have been proposed. The major features of the plan include the --

- extension of North Street into Pee Dee Avenue near Miller Street; circulation around the center to the north;
- designation of the area bounded by North, Third, South, and Depot Streets as the regional center;
- designation of the area west of the regional core as the wholesale-industrial "corridor" complex;

- designation of the area just north and south of the center as offices and high density residential areas;
- designation of the area east of the center as being general business.

Neighborhood and Community Shopping Centers

In developing future neighborhood and community shopping centers the following principles were considered:

- Shopping centers should be located at or near the intersection of major streets; located preferably on only one corner.
- Shopping centers should have easy access from trade areas; well-served by major thoroughfares.
- Site selection must recognize existing conditions and future land use proposals for the area.
- Neighborhood centers should be located generally within $3/4$ of a mile of every home, and community centers within $1\frac{1}{2}$ to 2 miles -- depending on the density of population.
- Shopping centers should have a separation of servicing facilities and truck access from customer circulation -- preferably the mall-type design.
- Shopping centers should have adequate parking available -- usually two square feet of parking or more per square foot of commercial floor area as a minimum, including access and maneuvering drives.

With the above principals in mind, the plan proposed three neighborhood shopping centers in the following locations:

- east side of Concord Road generally between Efird and Mill Streets;
- northeast corner of Pee Dee Avenue and Ridge Road extended;
- northeast corner of Ridge Road and the proposed outer loop.

The first neighborhood shopping center is a proposal of a partially existing center. Currently existing are a new car sales agency, gasoline station and furniture store. This site could be expanded to the east to approximately four acres and include convenient shopping and personal services. This site is in a desirable location and ties in favorably with the Sketch Thoroughfare Plan.

The second shopping center proposed is the expansion of an existing site north to Freeman Avenue which could turn into an attractive shopping center. Currently this has a small junior department store, supermarket and discount store, and has plenty of room for expansion. This site ties in favorably with the major street system as Ridge Road is proposed to be extended into Pee Dee Avenue and Arey Avenue.

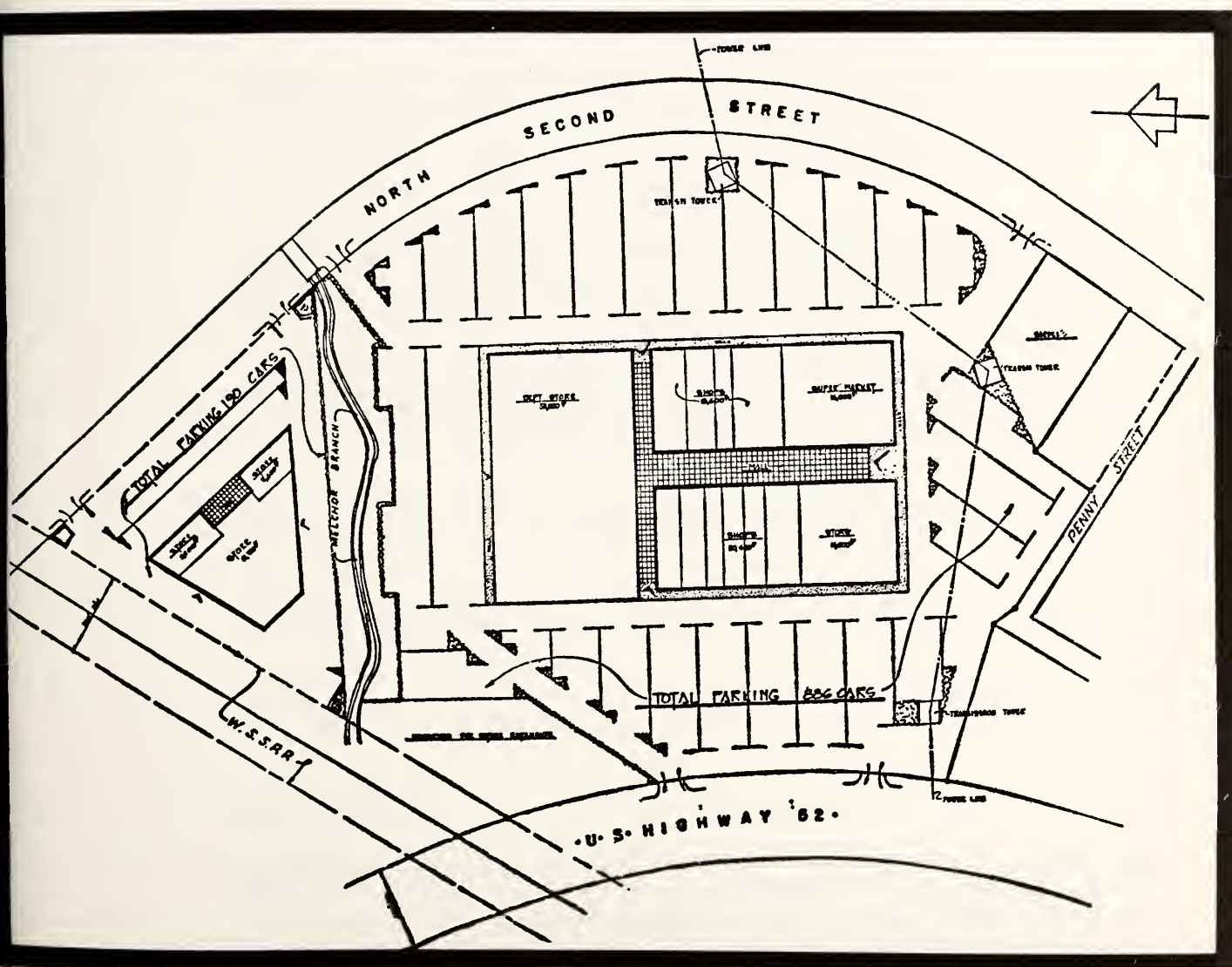
The last neighborhood shopping center proposed would not materialize generally within the planning period. This land has been set aside so that in the event a market does occur a site will have been reserved.

Community Shopping Center

The plan proposed one community shopping center located between North First Street and North Second Street adjacent to Melchor Branch. This site has already been proposed for a shopping center and grading is underway. Map XVI (following this page) illustrates the outline of the proposed shopping center. The proposed center contains 15 acres and will have four entrances -- two on North First Street and two on North Second Street. Parking will be provided around the enclosed (mall-type design) center requiring the pedestrian to walk no farther than 200 feet. The center, at completion, will accommodate 21 tenants under one roof (120,000 square feet) -- including two major tenants, a department store and supermarket containing 50,000 square feet and 16,000 square feet, respectively.

Because the center contains approximately 15 acres and a large department store, it cannot be considered a neighborhood-type shopping center.

Outline of New Shopping Center



Shopping Center Analysis

In planning for new shopping centers, the Planning Board should consider the following criteria:

1. Site Evaluation

Location and Access: shopping centers should be at the periphery of a growing residential area. Access should be from a major street and with arterial streets from residential areas leading directly to the center. Ingress and egress must not create congestion or back-ups and must be at least 200 feet from the intersection.

Shape: the property must be shaped so that the ultimate development is all in one piece, undivided by highways or important through traffic streets. Site should be rectilinear. Irregular sites with projections and indentations should be avoided.

Topography: a fairly level or gently sloping piece of ground is easily adaptable to the center for good drainage. Excessive slopes should be avoided.

Size: there must be sufficient site area for the initial development intended -- generally a minimum of four to a maximum of ten acres with room for expansion and for buffer strips. (Community shopping, maximum of 30 acres).

Utilities: should be nearby. Long runs to sewage and water should be avoided as it increases off-site improvements.

Favorable Zoning: a climate for good public relations for a planned neighborhood shopping center district.

Land Cost: the cost of the land must be compatible with the overall economics of the development.

2. Site Planning

Building Layout: major tenants (supermarket and drug-stores) should have choice location. All stores should be located and arranged according to best merchandising practice. Attention to future expansion is important.

Parking and Service Area: customer parking requires 400 square feet per car (minimum of 350 square feet); this includes access drives and landscaped areas in the customer area -- not including buffer strips and service areas.

3. Architectural Planning.

4. Feasibility and Economic Analysis.

Advantages of a Planned Shopping Center

- Adequate free parking, allowing for ample entrance and exit, and for minimum customer walking distance between the parked car and the store entrance.
- A building arrangement that is an architectural unit and not a miscellaneous assemblage of stores.
- The opportunity to have the cooperation of many merchants as well as the landlord in merchandise promotion.
- An agreeableness in surroundings that lends an atmosphere for shopping in comfort, convenience and safety, weather protection, foot traffic separated from vehicular traffic, landscaping, quality in design -- characteristics not associated with the usual commercial district.
- The possibility of one-stop shopping offering a selection of merchandise and tenants.

Free Standing Commercial

Free-standing commercial areas are defined as general commercial and highway business areas containing uses for which the sale of commodities or performance of service are on a city-wide basis as distinguished from the shopping center serving on a neighborhood basis. Each establishment stands by itself and does not depend on pedestrian shopping from store to store. Free-standing areas exhibit no hierarchy of size and bear little relationship to the city's residential areas. These stores cater to customers who come by automobile and who usually are making a single-purpose trip. Such uses are designated as having one or more of the following characteristics:

- the customer is the motorist himself;
- the customers do not make frequent purchases;
- they are large space users and have low rent-paying ability per square foot;
- their market is other businesses - not households;
- they combine retail, wholesale, service and repair in various ways;
- their market area is large and thin.

Examples of free-standing commercial uses are: auto dealers and repair shops, motels, drive-in businesses, amusement centers, bowling alleys, nurseries, some degree of wholesaling, and other similar uses.

The strip commercial development paralleling the major streets, for the most part, is considered free-standing commercial.

Development standards and principles used for free-standing commercial include:

- Consolidation of free-standing commercial into compact areas providing for good vehicular and pedestrian circulation, building layout with good appearance, adequate parking and room for expansion.
- Access roads or other traffic services should be constructed paralleling the major thoroughfare to limit the number of curb cuts and access drives to preserve traffic flow. This is particularly important along Highway 27 Bypass.
- Adequate setbacks, preferably 40 feet or more, should be provided for parking, loading and unloading space, and landscaping.

The plan proposes a total of 90 acres of free-standing commercial during the planning period. These areas are consolidated into choice locations shown on the Land Development Plan. Included are:

- Southeast and northeast corners of Highway 27 Bypass and Raleigh Highway containing approximately 10 acres and four acres respectively.

- North side of the Badin Highway where Old Pennington Road is extended into Badin Highway (outer loop) containing eight acres. The drive-in theater is in this location.
- West side of Highway 27 coming from Charlotte where the highway forks into the Bypass containing approximately five acres.
- West and east sides of Highway 27 approaching the city limits, generally between Slack Street and Long Creek. This area is generally developed containing approximately 10 acres.
- West and east sides of Highway 52 approaching Albemarle extending approximately 800 feet from the city limit line, north. This area is generally developed containing approximately eight acres.

Within the City a total of approximately 45 acres have been designed as free-standing commercial.

RESIDENTIAL DEVELOPMENT

The objective of the residential section of the plan is to provide home sites for the social and economic elements of the population within a physical environment that offers privacy and quietness; is healthy, safe, convenient, and attractive; has an environment of stable property values that afford opportunity for comfortable and creative living; and provides an adequate level of services giving due regard to the total needs of the city.

Residential land use proposals were based on the following locational requirements:

- Development should be controlled to minimize flood damage.
- Developments should be located only in those areas that are adequately and efficiently serviced by commercial, recreational and community facilities.
- Developments should avoid excessive grade, preferably under 15% slopes.
- Developments should be compatible with adjacent proposed uses. If possible, topography or transition of land uses should be used to separate uses which are incompatible with one another. (See Map 12A and 12B).
- Development, especially new subdivisions in the fringe area, should tie in with city utilities whenever possible.
- Fast, through traffic should be kept out of residential areas. This can be done by providing adequate capacity thoroughfares on the boundaries of residential areas and good design in subdivision layout.

Neighborhood Concept

As a result of the location requirements outlined above, overall objectives of the plan and natural growth patterns of Albemarle, it was possible to develop the "neighborhood concept" to assure adequate services and environment for a complete unit. The following general design principles were used in proposing the "neighborhood concept."

Size: a residential unit development should provide housing for that population for which one elementary school is required -- usually 2,000 to 7,000 persons.

Boundaries: the unit should be bounded by natural or man-made barriers such as rivers, difference in topography, existing or proposed major street routes, or railroads.

Shopping Center: if warranted by the population to be served, the local shopping center facilities should be located at the edge, preferably at an arterial traffic junction and adjacent to similar commercial districts (if any) of adjoining neighborhoods.

School: elementary school should be located as near to the center of the neighborhood as possible, generally within one-half mile walking distance of every home.

Recreation: the school and neighborhood park should be located adjacent to each other. These facilities should be generally within one-half mile of every home.

Commercial Acreage: generally there should be 2.5 acres for every 1,000 people living in the neighborhood; two square feet of parking for every one square foot of building as a minimum.

Collector Streets: collector streets should provide for the efficient movement of traffic within the residential unit with good access leading to the main arteries and to discourage its use by through traffic. Surrounding streets should be sufficiently wide enough to facilitate traffic bypassing the neighborhood instead of passing through it.

Off-Street Residential Parking: one space should be provided for each residential unit plus one additional space for every three units of a multiple-density development.

Densities:

Low-density areas - 2 dwelling units or under per net acre.

Medium-low density areas - 1 to 4 units per net acre.

Medium-high density areas - 5 to 7 dwelling per net acre.

High-density areas - 8-13 dwelling units per net acre.

Map XVII following this page illustrates a contemporary neighborhood layout designed to insure stability by using the above design principles.

Within the scope of the plan, the following neighborhoods have been proposed in Albemarle:

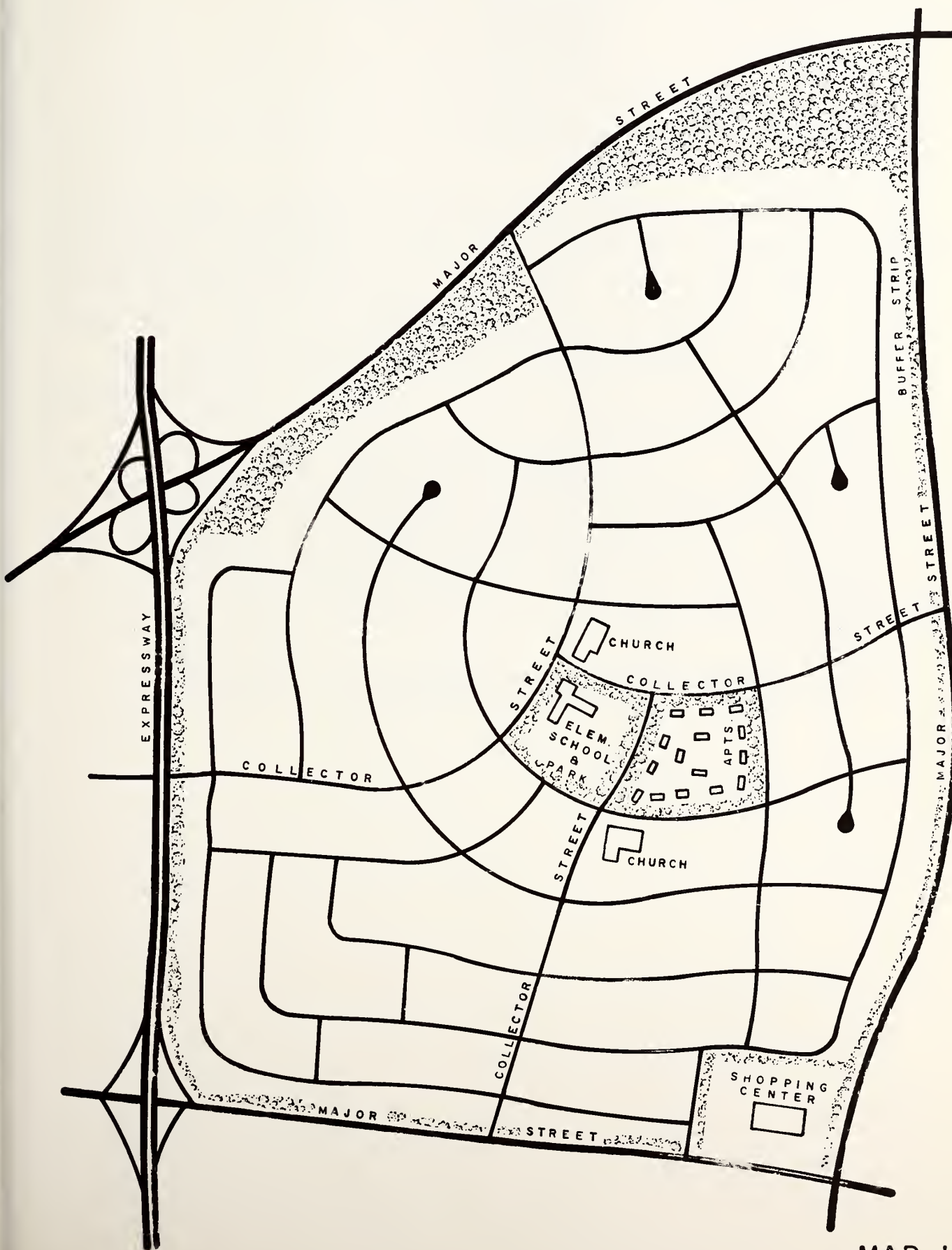
- Northeast (planning unit #1 and part of A-11) in that area bounded by the N. C. 27 Bypass on the east, East Main Street on the south, Ridge Street on the west and the proposed outer loop extended from Old Pennington Ferry Road. Densities are planned for low to medium low.
- Forest Hill area (planning unit #2 and part of A-12) bounded by East Main Street on the south, Ridge Road on the east, Old Pennington Ferry Road extended on the north and the industrial complex on the west. Medium-low to medium-high densities are planned.
- Kingville area (planning units #12 and #13) bounded by N. C. 27 Bypass to the south and southeast, and East Main Street on the north. Medium-high density is planned.
- Northwest (planning units #6, #7, and part of A-1, A-14, and A-13 to the proposed outer loop) planned for medium to high density areas.
- Southwest (planning units #8, A-4, A-5 and a portion of unit #9) to the industrial district on the east served by West Albemarle Elementary School.

Residential Land Requirement

The residential portion of the plan is projected to need approximately 530 acres by 1985. This projection was based on the amount of residential construction between 1950 and 1960, as listed below and assumed that this would continue into the future.

THE CONTEMPORARY NEIGHBORHOOD LAYOUT

— INSURES STABILITY —



<u>Year Built</u>	<u>Total Structures</u>
1950-1954	467
1955-1960	<u>381</u>
Total Structures	<u>848</u>
Structures per year	<u>85</u>

If this trend continues there will be a projected need of 2,125 residential structures by 1985. Assuming that the preceding structures will develop at an average density of four dwellings to the acre, there would be a need for 530 acres of residential land.

The following areas indicate growth potential during the planning period:

- Northeast -- from existing development to the proposed outer loop and along the Bypass.
- East -- from existing development along Highway 27 and Highway 23 to Anderson Road.
- North -- from existing development north along Highway 52 and Palestine Road.
- Northwest -- from existing development to the proposed outer loop.
- Southwest -- from existing development extended along Highway 27 and portions of the Bypass.

COMMUNITY FACILITIES PLAN

The objective of the community facilities section of the plan is to provide for certain facilities (schools, parks, fire stations, etc.) to meet both the existing and growing demands of the Albemarle populace. The existing community facilities are illustrated on Map XVIII A, and the community facility plan is shown on Map XVIII B.

SCHOOLS

In determining the general location and future school needs by 1985, the following principles and standards were developed:

Principles

The elementary school should be located in the heart of the residential neighborhood (neighborhood concept) so that children need not cross major streets which carry traffic or cross railroad lines at grades unless unavoidable. (See Map XVII).

Walking distance for elementary students should not be any farther, generally, than one-half mile one way, one and one-fourth mile for Junior High, and two miles for Senior High students.

Schools should be integrated with a park whenever possible in order to avoid duplication of recreational facilities.

School locations should not be next to those types of land uses (such as industry and railroads) which may be hazardous to the operation of the school.

Standards

School standards were derived from nationally recognized standards and adjusted to meet the local situation in the Albemarle planning area. The following standards were developed:

EXISTING COMMUNITY FACILITIES



Albemarle Planning Area

3000' 0 3000'

Scale In Feet



PROPOSED COMMUNITY FACILITIES



Albemarle Planning Area

3000' 0 3000'

Scale in Feet



LEGEND

- E ELEM. SCHOOL
- J JR. HIGH SCHOOL
- H SR. HIGH SCHOOL
- P PARKS
- S SEWAGE TREATMENT PLANT
- F FIRE STATION
- △ PROPOSED FACILITIES
- EXPANSION OF EXISTING SITE

School Park Concept. This is a concept used in developing the school contiguous to the park. In combining the school-park facilities not only are the necessary park-playground facilities that complement the education and recreational needs provided, but savings to the taxpayers result since duplication of facilities is avoided. The School Board usually provides restrooms and indoor recreation space, while the Recreation Department provides and maintains the outdoor recreation space. The Recreation Department is, therefore, relieved of the responsibility of constructing a neighborhood community building and the School Board on the other hand can purchase a much smaller site -- one adequate for the building and parking only. It is necessary, however, that both agencies work closely together for the concept to become a reality. Table XVI indicates the recommended school-park joint ownership.

TABLE XVI RECOMMENDED SCHOOL-PARK JOINT OWNERSHIP

Public School Type	Total Acreage Needed	School Owned Acreage	Park Dept. Acreage
Elementary	10-15 (1)	5	5-10
Junior High	20-30 (2)	10	10-20
Senior High	30-50 (3)	15	15-35

- (1) Elementary school sites should have a minimum of five acres with an additional acre for each one hundred pupils. An additional acre per one hundred pupils is added when a school is developed with a park.
- (2) Junior High needs a minimum of 20 acres plus one acre per one hundred students.
- (3) Senior High needs at least 30 acres as a minimum with 50 acres being desirable.

Desired School Capacities. School planning standards recommend that elementary schools have an enrollment between 400 and 600 pupils to be most functional and efficient; Junior High, about 800 to 1200; Senior High about 1200 to 1500 pupils. These standards should be applied to all new and existing schools whenever possible.

School Service Area. The neighborhood is a residential unit designed to provide the area for which one elementary school is required. The focal point of the neighborhood is the school serving all homes generally within a one-half mile radius.

The Junior and Senior High Schools serve as the educational, social, cultural and recreation centers of a community. A service radius of one and one-fourth miles and one and one-half miles to two miles are recommended standards for both Junior and Senior High schools respectively. Location on a major street is desirable, especially at the Senior High with the increase of student drivers.

Existing School Site Proposals

TABLE XVII		EXISTING SCHOOL FACILITIES, CAPACITY, ENROLLMENT, YEAR BUILT, AND EXISTING AND PROPOSED SITE AREAS - 1963 - 1964					
School	Grade	Year Struc. Built	Cap.	No. of Stud.	Defi. or Surplus	Exist- ing Acres	Pro- posed Acres
Senior High	10-12	1958	600	527	+73	27.0	35
Junior High	7-9	1925	750	615	+135	4.5	11
Central Elem.	1-6	1920) 1951)*	600	551	+49		
East Albemarle Elementary	1-6	1924) 1954)*	270	204	+66	9.2	15
North Albemarle Elementary	1-6	1949	480	354	+126	15.0	15
West Albemarle Elementary	1-6	1937) 1951)*	350	214	+36	2.8	7.6
Kingville (Negro)	1-12	1936) 1956)*	650	639	+11	10.0	30
Elementary				302			
Junior High				202			
Senior High				135			

*Denotes year of expansion.

Albemarle Senior High

A proposed addition of eight acres to the High School will provide a thirty-five acre site. Additional vacant land to the north and east of the site could be acquired. The High School currently has four unimproved tennis courts, a turf practice



field for football, and a new gymnasium. It is recommended that a proposed stadium be constructed during the planning period adjacent to the school to serve adequately the needs of the community. The site is in a desirable location as it ties in favorably with the proposed major thoroughfare system.

Junior High and Central Elementary Schools

The school grounds for both schools are very inadequate. Very little playground space is available for the 1,166 students who attend the two schools. The plan proposes that additional land be acquired on the same block to the east. This additional land is presently developed and it would mean acquiring eight residential structures for a total site of approximately eleven acres. It is noted that the proposed eleven acre site is still not desirable but this is the only land available -- especially if the school-park is to be consolidated on one site.

East Albemarle Elementary School

The plan proposed that within the planning period East Elementary be converted into a Junior High school and that a new elementary site be acquired to the north to tie in with the neighborhood concept. The proposed Junior High would serve the eastern sector of Albemarle and the fringe area as new growth is moving in this direction. It is recommended that additional land (approximately five acres, including six residential structures and closing off Berry Avenue) be acquired to the west of the present site. The Recreation Department could purchase this land and develop it into an attractive park in coordination with the proposed Junior High.

North Albemarle Elementary School

North Albemarle Elementary School contains about 15 acres serving the northwest sector of Albemarle. It contains a desirable site and location but there are no developed play areas for the children. It is recommended that the Recreation Department, in cooperation with the School Board, develop a neighborhood park

(school-park) concept of five to ten acres on the existing site.

West Albemarle Elementary School

West Albemarle Elementary School is located in the southwest sector of Albemarle. The site is very inadequate, using only 2.8 acres with no park-playfield facilities for the children in the neighborhood. It is proposed that a triangular piece of school property adjacent and to the east (containing 2.7 acres) be developed as a neighborhood park playground area in cooperation with the Recreation Department. It is further recommended that eight additional residential structures containing 2.1 acres be acquired to the north and adjacent to the school and be developed for additional recreational facilities. West Park Street, where it intersects with Short and Stonewall Streets, should be closed off to insure a safe connection with the park area -- thus a school-park with approximately 7.6 acres serving the neighborhood.

Kingville Schools

The Kingville School (non-white) site includes an elementary school, a Junior High and a Senior High School, on ten acres. Because of the three schools and the size of the enrollment it is not large enough to serve the needed school requirements. The plan proposes that the School Board, in cooperation with the Recreation Department, acquire an additional 15 to 20 acres to develop the necessary park-playground facilities. The school-park would then contain approximately 30 acres and generally extend to Lundix Street on the north, Washington Lane on the east and the Bypass to the south. It should be noted that this additional land could be acquired through a possible urban renewal or private redevelopment project. If urban renewal is contemplated it is possible that any improvements made on the school facilities generally within the last seven years could be deducted from the City's local one-third share of the project cost.

Proposed New School Sites

Two school sites (combined school and park) of approximately 10 to 15 acres each serving generally a one-half mile radius are proposed in the following areas:

- The Forest Hills area (Planning Unit 2) in the general vicinity of North Sixth Street, Melchor Branch and Avondale Street.
- In Planning Unit 2 in the vicinity of Rankin Street and East Cannon Avenue.

PARKS AND RECREATION

This section of the community facilities plan deals with requirements for the achievement of adequate parks and recreational acreage for Albemarle. In the Summer of 1963 a separate Recreation Study analyzed existing public and private recreation facilities in significant detail and then made recommendations for existing and proposed facilities. It is the objective of this section of the community facilities to carry over many of the recommendations made in that study and included within this portion of the plan.

In developing the plan for parks and recreational facilities the following standards and principles were considered:

Principles

- Provision should be made for the recreational needs of all age groups.
- All recreational sites within the total planning area (inside and outside the city limits) should be considered when developing the plan.
- A unified system of recreational areas should be provided rather than separate and unrelated sites.
- The school-park concept should be utilized whenever possible.

Standards - Neighborhood Recreational Facilities

-- Playground

Age Groups: Primary center for elementary school children of 5 to 15 years of age.

Facility: Corner of area for pre-school children. Landscaped for neighborhood park area for sitting and other passive recreation, with corner for other games and other equipment for older people. Apparatus area for older children. Open space for informal play. Space for tennis, softball, handball, volleyball, walking or swimming pool, etc.

Size of Area: Three to seven acres. Five acres are a desirable minimum.

Preferred Location: Adjacent to elementary school with travel distance of approximately one-half mile where children do not have to cross major streets.

-- Neighborhood Park

Age Groups: All ages, but in particular, mothers with smaller children and older people.

Facilities: Place for sitting, sunning, and for quiet relaxation.

Size of Area: Should be one-half to two acres as part of a playground or playfield to seven acres when separate - one acre per 1,000 population.

Preferred Location: At the center of the neighborhood as part of playground or playfield and connected with school. It should also service neighborhoods that are beyond walking distance of large parks. Walking distance is generally one-half mile. It may be located on a site that is undesirable for building purposes because of poor drainage, irregular topography or odd size. It may serve as a buffer between the residential neighborhood and other high activity

districts -- such as major highways, industrial areas, and business districts. All of these natural features may add to the interest of a naturally developed area. Sometimes a neighborhood park will include picnic facilities and areas for free play.

-- Community Recreation Facilities

Age Groups: Youth and adult, 15 years and over.

Facility: Should include area for active organized play with more space than playgrounds. Includes: sports fields for softball, baseball, football, field hockey, volleyball, etc.

Size of Area: 12 acres minimum, 20 acres desirable.

Preferred Location: Adjacent to Junior or Senior High School, or other areas located so that they are easily accessible.

-- Large Parks or Municipal Parks

Age Groups: All.

Facilities: The park usually features nature trails, picnic facilities, open spaces for free play, camp sites, parking areas (most users will arrive by car) and large tracts of natural wooded land. The park might contain an area or two set aside for active recreation such as a ball field, or tennis courts, depending on the size of the park.

Size of Area: From 10 to 100 acres.

Preferred Location: Depending on natural features and available vacant land. Accessibility by car is important.

PARK PROPOSALS

Neighborhood Parks and Community Parks

- The school-park concept is proposed for West Albemarle, North Albemarle, Central Elementary and Junior High and Kingville Schools. This concept provides for the playfield and park to be developed adjacent to the school containing five to ten acres.
- It is proposed that the City acquire at least twenty acres of open space owned by Efird Mills and developed as a neighborhood park. The existing ball diamonds could be supplemented by fields for athletic and free play. The wooded area should be retained and cleared.
- It is proposed that a small odd-shaped green space about 3.4 acres in size at the intersection of Salisbury Avenue and Carolina Avenue be maintained in its present state of development as a neighborhood park. Because high tension power lines pass over this site its use is ruled out as an active recreation area. However, it is a spot of beauty and should be preserved for passive or inactive recreation.
- It is proposed that the northwest corner lot on Fifth Street and Cannon Avenue (about one acre) be acquired and developed as a neighborhood playground. It is further proposed that additional land adjoining the corner lot and fronting on Fourth Street should be acquired, if possible. The playground area could contain such features as passive recreation under the shade trees, a shelter for arts and crafts, and a spray pool and apparatus area.
- It is proposed that a 4-6 acre site be obtained in the Smith Street or Montgomery Avenue areas for a small playfield containing free playing space and tennis courts to serve play unit #2.
- It is proposed that additional land be acquired adjacent to the High School and be developed into a community park. Presently the school owns 27 acres of land with an additional eight acres proposed. It is possible that coordination could be obtained with the Recreation Department and the School Board in acquiring this additional land and using about seven acres of the existing sites for a community park.

- Approximately 15 acres or more between Highway 52 and the Winston-Salem Railroad just north of the proposed outer loop are proposed as a community park. This area is undesirable for building purposes because of its susceptibility to flooding, and the topography is irregular. Because of these limitations, this area is best suited as a passive recreation park with possible picnicking areas serving as an attractive beauty spot when coming into Albemarle.

Municipal or City-Wide Parks

- Rock Creek Park, containing approximately 22.3 acres, is proposed as a municipal park. The park could be developed as a unique picnicking and day camp area taking advantage of its large wooded area and stream. Provisions should be made available for a municipal park-playfield to specialize on those activities for which it is best suited.
- It is proposed that the City acquire a tract of land, 25 acres or more, in the northeast sector of the City at the southeast corner of Ridge Road and Old Pennington Ferry Road extended, as a municipal park-playfield. This park would provide area for a new recreation center as well as fields for athletic and passive recreation. The park could include such facilities as a swimming pool and bath house, a pitch and putt golf course, an archery range, a football field, a baseball diamond, softball fields, an amphitheater, tennis courts, picnic area and other facilities.

MEANS AVAILABLE FOR THE ACQUISITION OF PARK LAND

Numerous methods of acquiring land for present and future park development are available to the City of Albemarle. The most important of these are:

Gifts: Gifts of land are sometimes donated to the city. Acceptances should be made of those areas that are properly located, adequate in size and can be reasonably maintained.

Comprehensive Plan: A comprehensive plan for the city (such as this plan) will encourage setting aside areas for future recreational sites. A plan of this nature would indicate the general locations of these sites and serve as a guide in reserving such space from encroachment.

Purchase: The city may purchase land in desirable locations, especially undeveloped areas where land is cheaper so that it can be reserved to service future development. Land acquired through this means may consist of outright purchases, taking option for purchase, or purchase of development rights.

Subdivision Regulations: By the use of subdivision regulations a subdivider may be required to dedicate or reserve land for parks, open spaces, and schools. Many experienced subdividers are willing to make such a dedication because the value of the lots will usually be increased.

Tax Delinquent Lands: Land which has been turned over to the city because of tax delinquency may be used favorably in the recreation program. Sites, however, should be of suitable locations and adequate size.

Urban Renewal: Urban renewal should be used only when private types of developed land prove infeasible. The Federal Government contributes 2/3 of the net project cost while the city contributes 1/3 of the cost. This may be one of the most successful means of acquiring additional park land, especially in the Kingville area.

Condemnation: Property owners of condemned property are given fair market value for their land. This costly and time-consuming method is certainly a means of acquisition but is seldom used by a city unless little choice remains.

FIRE STATIONS

There are two existing fire stations -- one located in the western section of the City on Concord Avenue and the other in the heart of the central business district. It is important that Albemarle relocate the existing fire station in the central business district to a more accessible and convenient location.

In determining new site proposals for fire stations the following standards and principles were considered:

- The immediate vicinity of a fire station should be free from land uses which make it difficult or dangerous for quick take-off for fire equipment.

- The streets on which the fire equipment is moved out should lead naturally across the city making a fire truck line connecting with arteries and streets going in any direction to the area of fire.
- Fire stations in the central business district should be located away from the retail core to serve not only the business core area but surrounding areas outside.
- Fire stations should be located in those areas where the noise and disturbance from take off presents the least problem. Preferred location is in the warehouse and industrial district if possible.
- Fire stations should serve roughly three-quarters of a mile for commercial and manufacturing areas; one and one-half miles for denser residential areas; one and one-half miles to three miles for scattered residential areas.

Fire Station Proposals

It is proposed that the existing fire station located in the central business be relocated in the vicinity of Ridge Road extended and East Main Street. Removing the fire station from its present location to the proposed new site would provide parking areas around City Hall, extend the coverage area to include the eastern section and fringe area, and would tie in favorably with the proposed thoroughfare system (connecting with arteries and streets going in any direction of a fire). It is further proposed that the City obtain another site, preferably in the industrial district, for fire-fighting training. This site should consist of a fire training tower, paved hose drag area, maneuvering space for equipment and a pit for oil training fires. The areas should be fenced in for the protection of the public and of the facilities.

Other Community Facilities

Approximately 45 acres of land are currently reserved for a hospital-medical center in the vicinity of the hospital. This area will include related uses such as clinics, doctors offices, nursing quarters, etc.

UTILITY PLAN

Since the systems for the distribution of public utilities represent an essential element in the land development plan it is important that public utilities and related service facilities are provided in response to both the existing and the proposed patterns of urban development.

Sewerage System Plan

One of the most important consequences of urban growth is the need for providing adequate sewers and efficient means of sewage treatment and effluent disposal.

The treatment plant appears to be adequate in serving the needs of the community during the life of the plan; however, certain major trunk line proposals, as programmed by the City Engineer, are needed to serve more adequately the future growth needs of the planning area. Map XIX illustrates the existing and proposed sewerage system for the Albemarle Planning Area. Generally, the plan includes:

- The extension of the existing 12" main from Ridge Road and Melchor Branch northeast and southeast along the Melchor Branch drainage area.
- The extension of a 12" trunk line from the existing 12" trunk line near Melchor Branch and Highway 52 north into the Palestine Road by way of Little Long Creek.
- The extension of two 8" trunk lines from the Melchor Branch 12" main into that area bounded by Ridge Road and Old Pennington Ferry Road.
- The extension of the existing 12" trunk line along Coley Branch from Sherwood Street north into the Mann Road vicinity.
- The extension of an 8" main from the existing 15" main at Long Creek south along West Main Avenue to the proposed outer loop.
- The extension of a 12" main north from Concord Road near Long Creek (following the drainage area) to the vicinity of Pennington Road.

EXISTING AND PROPOSED SEWERAGE PLAN



Albemarle
Planning Area



LEGEND

PROPOSED	EXISTING
.....	— 36"-24" LINES
.....	— 20"-18" LINES
.....	— 15"-12" LINES
.....	— 10"-8" LINES
	■ TREATMENT PLANT

- The extension of a 10" main from the existing 36" main near Little Long Creek east along Prison Camp Road into Aquadale Road.
- The extension of an 8" main from the existing 10" main near the airport to serve the proposed airport industrial complex.
- The extension of an 8" main under the Bypass tying in with the existing 15" main near Lee Avenue and the 8" main at Holbrook Street.

The soils in the Albemarle fringe area (indicated in Chapter II) are very tight and sticky and range from extremely poor to average when used for individual septic tank purposes. Since this area most likely will become a part of Albemarle in the future it is recommended that the City develops a policy whereby developers could tie in with city utilities whenever possible. It is important to note (see Map XX) that a majority of the fringe area could be very easily served on a gravity flow system to the existing sewerage treatment plan. Small areas to the east, south-east, south and southwest of the perimeter area will need pumping stations to pump the effluent into the gravity feed system.

Water Plan

The water filtration plants appear to be sufficient for normal growth during the planning period as the ultimate capacities are 8,000,000 and 2,000,000 (auxiliary plant) gallons per day respectively. There is a need, however, for additional trunk line proposals to serve Albemarle adequately as the city expands. Map XXI illustrates both the existing and proposed water system as programmed by the City Engineer. Generally, the plan proposes the following:

- An alternate 20" trunk line (to serve Albemarle to the northeast and also in case of emergencies with the existing 20" trunk line running along Highway 52) be constructed from the treatment plant coming in near Ridge Road and the outer loop.

DRAINAGE PATTERNS





Albemarle
Planning Area

3000' 0 3000'
Scale in Feet



LEGEND

-  NATURAL DRAINAGE (GRAVITY FLOW) TO SEWAGE TREATMENT PLANT
-  DRAINAGE FLOW

EXISTING & PROPOSED WATER PLAN

Albemarle Planning Area



LEGEND

PROPOSED	EXISTING	
.....	—	20" LINES
.....	—	16"-14" LINES
.....	—	12"-10" LINES
.....	—	8"-6" LINES
	●	ELEVATED TANK
	■	TREATMENT PLANT



- A 16" trunk line extended from the proposed 20" trunk line (near Ridge Road and the outer loop) running south along Ridge Road to Montgomery Avenue and Montgomery Avenue to the elevated water tower on Smith Street (250,000 gallon capacity).
- A 10" trunk line tying in with the existing 20" trunk line on North Second Street and extending east along Palestine Road into the proposed outer loop tying into the proposed 20" trunk line at Ridge Road. The extension of this trunk line along the outer loop into the Bypass and along the Bypass south coming around into Wall Street (and tying in with the existing 12" at Wall and Gibson Streets) and continuing along the bypass.
- The extension of a 10" trunk line from Snuggs Road and Salisbury Avenue (tying in with the existing 12" trunk line) along the proposed outer loop (with a tie-in extension extended from the existing 12" trunk line at West Oakwood Street and Pennington Road) and tying in with the existing 12" trunk line near Lowder Avenue, the extension of this 10" trunk line along the proposed outer loop (Populin Grove Church Road) into Main Avenue tying in with the 8" main extending along West Main Ave.

Drainage and Flooding

Albemarle is faced with a few problems where flooding occurs along the several drainage areas. Of course, the clay soil (known as slate rock area) has added to this problem. Map XXII illustrates those areas that are susceptible to flooding along the creeks.

It is recommended:

- That control facilities to protect developed areas, especially proposed industrial development, be constructed where justified, utilizing available outside financial assistance when possible. This may include:
 - building levees and flood walls to confine the areas subject to flooding, and
 - stream clearance and channel improvements.
- That new development in areas subject to flooding be controlled by:
 - acquiring, by dedication or purchase, flood lands for parks and open greenbelts;

AREAS SUSCEPTIBLE TO FLOODING



Albemarle
Planning Area

3000' 0 3000'
Scale in Feet



zoning floodable areas for open types of development;

requiring that new buildings (through subdivision regulations, building and housing codes and administrative policy concerning the extension or construction of utilities and other public facilities) be controlled to minimize flood damage.

CIRCULATION PLAN

Long-range planning is perhaps more essential to the major street and highway pattern than it is to any other community facility. It is relatively simple to locate streets and highways in an area that is becoming subdivided or urbanized; however, without a city-wide thoroughfare plan, major streets may become improperly located or designed. With underground utilities, street lights, poles and development paralleling the major streets, it becomes extremely expensive should realignment or widening become necessary. As a result, it is important that a thoroughfare plan be coordinated and planned as a composite part of the total land development plan for the urbanized area. The thoroughfare plan and land development plan must be developed simultaneously if they are to insure easy movement of people and goods from one area to another.

In developing the circulation plan for Albemarle the following principles and standards were developed:

Principles

- Whenever possible, major thoroughfares should go around natural residential neighborhoods rather than through them. Major thoroughfares with wide rights-of-way should be located so as to provide buffers between incompatible land use areas.
- Thoroughfares should be so located and designed that they move traffic quickly, efficiently, and safely between the various parts of the urban areas (particularly between residential areas and employment centers) with the minimum amount of damage to abutting land.
- Widths of proposed rights-of-way should generally be based on anticipated future traffic.

Standards

- Street standards were designed from nationally recognized standards and adjusted to meet Albemarle's situation. The categories of streets with rights-of way and pavement width are indicated in Table XVIII.

Street Classifications

Streets in Table XVIII serve the following purposes:

Local Residential Streets: the lowest order of streets which provide access to property abutting the public right-of-way including both vehicular and pedestrian access.

Collector Streets: primarily a residential phenomenon serving to drain traffic off local residential streets before volumes get too high, and leading the traffic to arterials or to local generators such as schools, shopping centers, or community centers. It is important that the streets be so designed to discourage through traffic from cutting through the neighborhood.

Major Streets: the heavy traffic carriers into which collector streets empty. Major streets should border residential neighborhoods rather than penetrate them as they are hazardous to safety, especially for children. These streets should not be bordered by strip or ribbon commercial development. Such development lowers the capacity of a major street because of the high traffic they generate and the large number of driveway connections which create a hazardous problem for vehicles frequently pulling in and out.

TABLE XVIII PROPOSED MINIMUM STREET STANDARDS
ALBEMARLE PLANNING AREA

Street Type	Right-of-way Width in Feet	Pavement *** Width in Feet
Major Thoroughfares	80-100 *	54
Bypasses	120	92 **
Residential Collector	60	45
Local or Minor Residential	50	37
Cul-de-sacs	50	32
Streets located within the City's one-mile perimeter area	60 ***	37

* 80 feet acceptable, but 100 feet desirable.

** 44 foot median strip.

*** 60 feet is the minimum size State Highway Department will maintain.

**** Measured back to back of curb.

Based on planning principles and standards, the following major thoroughfares are proposed in Albemarle. (See Map XXIII).

1. OUTER LOOP - designed to carry traffic from one area to another in Albemarle, thus relieving the heavy congestion that occurs in the central business district. Generally, the outer-loop consists of the following:

- Bypass 27 on the south and east, the extension of Old Pennington Ferry Road from Ridge Road into the Bypass, the extension of Old Pennington Ferry Road into Palestine Road and Pennington Ferry Road extended into Boone Street (at the high school) crossing the creek and tying in with Snuggs Street at North First Street (Highway 52), the extension of Snuggs Street from Salisbury Avenue to the northwest tying into Pennington Road near S. R. 1407, the extension of the proposed loop from Pennington Road south along the drainage pattern of the land into Poplin Grove Church Road (crossing Highway 73 and Long Creek), the extension and widening of Poplin Grove Church Road into St. Martin's Church Road and then back into the Bypass.

2. CENTRAL BUSINESS DISTRICT LOOP - designed to move traffic around the central business district and separate the pedestrians from the automobile traffic as much as possible. Generally, the loop consists of:

- Pee Dee Avenue extended into North Street near Miller Street*, South Street on the south, the extension and widening of Third Street on the east into South First Street, and the widening of Depot Street on the west.

3. OTHER THOROUGHFARE PROPOSALS - designed in general.

- Widening and realignment of Salisbury Avenue from Snuggs Avenue to North First Street.
- Widening of Carolina Avenue from Salisbury Avenue to West Main Street.
- Extension of Carolina Avenue from West Main Street south through the proposed industrial complex into the Bypass.

*Pee Dee Avenue could be designed to move one-way traffic west into North Street, and east Main Street as one-way east to the intersection of Pee Dee Avenue.

- Extension of the industrial corridor road from the Bypass into Aquadale Road.
- Widening and extending Ridge Road into Arey Road.
- Widening and extending Arey Road into the Bypass.
- Widening North Third Street from Montgomery Avenue to North Second Street.
- Widening and extending South Third Street from East Main Street to tie in with South First Street (Norwood Highway).
- Widening East Main Street from the Bypass to East Main and Pee Dee Avenue.
- Widening of South First Street from Old Charlotte Road to South Second Street.
- Widening of Concord Road from Sunset Avenue to the proposed outer loop.
- Widening of Snuggs Street from Salisbury Avenue to Highway 52.

The following is a list of the ways in which the thoroughfare proposals of the plan may be implemented:

- The establishment of building line setbacks.
- Requiring subdivision plats by the use of subdivision regulations to conform with the land development plan.
- Long-range programming of improvements whereby cost will be met by the City with a certain percentage from the State.
- Acquiring rights-of-way by the City and the State in those areas where it will not be possible to obtain rights-of-way by dedication.

Bridges Proposed

The circulation plan has made several major proposals for the development of new thoroughfares. Bridges are recommended in those locations where creeks or major grade separations appear in the topography of the land. They are:

- Snuggs Street extended east from North First Street (Highway 52) crossing Little Long Creek.
- Old Pennington Ferry Road extended east from Ridge Road and crossing the topography difference and the drainage pattern leading into Melchor Creek.

SKETCH THOROUGHFARE PLAN



Albemarle
Planning Area

3000' 0 3000'

Scale in Feet



LEGEND

- THOROUGHFARE
- EXISTING MAJOR
- PROPOSED MAJOR
- COLLECTOR STREETS
- PROPOSED BRIDGES

- The outer loop extended from Highway 73 into Poplin Grove Church Road crossing Long Creek.
- Snuggs Street extended to the northwest from Salisbury Avenue (part of the proposed outer loop) and crossing Coley Branch.
- Carolina Avenue extended into the Bypass crossing Long Creek and Poplin Creek.

Railroads

It was illustrated in Chapter III, Analysis of Existing Land Use, that Albemarle is faced with the problem of railroads and highways crossing at the same level. Recommendations are made in the following locations in respect to the separation of railroads at grade intersections:

- Northwestern and Winston-Salem Railroad crossing at West Main Street. (Overpass).
- Northwestern Railroad crossing at Snuggs Street. (Overpass).
- Northwestern and Winston-Salem Railroad crossing at Salisbury Avenue. (Overpass).

Air Transportation

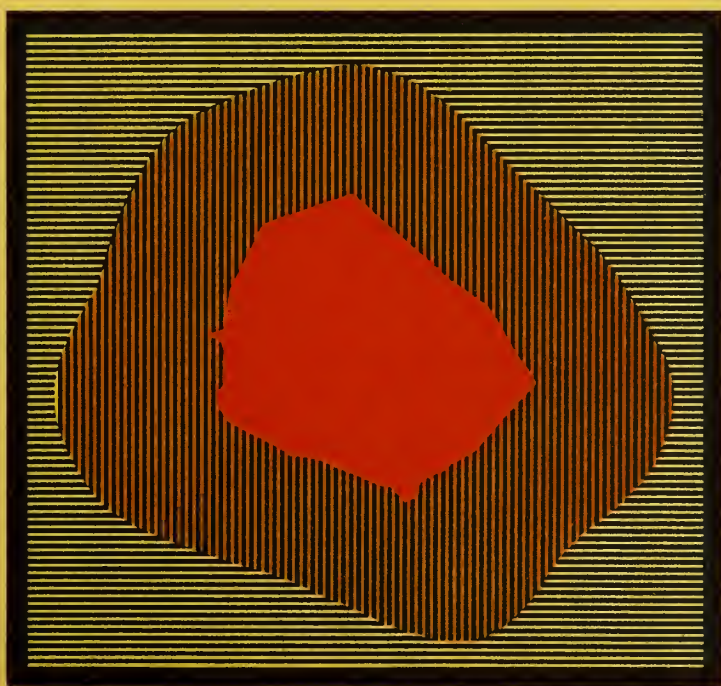
The Douglas Airport in Charlotte adequately serves the air travel needs of the Albemarle planning area. The airport is located approximately 50 miles southwest of Albemarle and is a driving distance of approximately one hour.

BENEFITS OF A PROPERLY DEVELOPED THOROUGHFARE PLAN

- Land developers will be able to design their subdivisions so that streets will function in a nonconflicting manner with the overall plan.
- Local citizens will know which streets will be developed as major thoroughfares and then will have assurance that residential streets in their areas will not become major traffic carriers.
- Each street can be designed for a particular purpose which leads to stability of traffic and land use patterns.

- City officials will know where improvement will be needed and schedule funds accordingly.
- School and recreation officials can plan and locate their facilities in desirable places with knowledge of land uses and street system stability.

PUTTING THE PLAN INTO EFFECT



CHAPTER V

PUTTING THE PLAN INTO EFFECT

Tools of implementation to gradually help carry out the land development plan involve government and private (persuasive) action. Private action includes various attempts at educating the public and governmental officials responsible for day-to-day decisions which will influence the plan. Government controls include zoning, subdivision regulations, building and housing codes, redevelopment and urban renewal, and public improvements programming.

Private Actions

Public education in the form of giving developers assistance in making private decisions can influence community growth. The education of those who are responsible for the physical development of the community -- builders, banks and leading officials, and utility companies -- would be a tremendous asset in helping to carry out the proposals outlined in the plan. Other methods available could include: radio, TV, and newspaper broadcasts; a planning education program in local schools and adult courses; public lectures and discussion to various clubs and groups about the land development plan.

Governmental Actions

Zoning is probably the single most important legal device available for translating the land development plan into reality. In the past the zoning ordinance was adopted before there was a plan. This is particularly true of Albemarle. It is now felt that a zoning ordinance not based on a plan is generally not considered valid. The zoning process is essentially a means of insuring that land uses of the community are properly situated in relation to one another; that adequate space is available for each time of development; that density of development in each area is held at a level which can be properly serviced by such governmental facilities as the street, school, recreation and utility systems; and that development is sufficiently

"open" to permit light, air and privacy for persons living and working anywhere within the planning area. The zoning ordinance is not a long-term program but rather a short-term expression of the long-term range of the land development plan. It should be revised periodically to assure that development gradually approaches the proposals outlined within the plan.

Subdivision Regulations require principles of good design when subdividing land into building sites and are one of the most important ways of guiding land development. To a large extent, the manner in which land is divided determines the physical form of the city; therefore, the subdivider plays an extremely active role in shaping the future urban patterns in the Albemarle planning area.

Subdivision regulations develop standards which assure sites of adequate shape and size; streets that are properly designed and aligned for safety and efficient vehicular movement; utilities and drainage ways that are adequate; and layout that is compatible with adjacent properties and is properly coordinated with other areas of the total planning area.

Redevelopment - Urban Renewal, a time-consuming and costly process, is certainly a tool of implementation, but of necessity must be used only after every effort to secure private action has been unsuccessful. Through the urban renewal process a means is provided to assist urban areas in fighting back at blight and decay of residential, industrial and commercial lands. Through renewal, deficiencies of a particular clearance of an area may provide a park or additional land for a school which might otherwise be impossible within a built-up area. Such a project could possibly qualify in the Kingville area and give more land for additional school acreage. In addition, public housing may want to be considered in the Kingville area as a means of housing the lower income groups in more adequate facilities.

In order to qualify for Federal aid in urban renewal Albemarle must establish a workable program. The workable program must meet the following criteria:

1. Adequate local codes (such as zoning ordinances, subdivision regulations, building codes, etc.) and ordinances effectively enforced or the prospect of adopting such codes and ordinances.

2. A comprehensive plan for the development of the whole community.
3. An analysis of blighted neighborhoods recommending whether the appropriate treatment is conservation, rehabilitation, or clearance and redevelopment.
4. Adequate administrative facilities to carry out the urban renewal program.
5. Ability to meet financial obligations and requirements.
6. Responsibility for adequately rehousing all families displaced by urban renewal or other governmental activities.
7. Evidence that the program has been prepared with citizen participation.

Building and Housing Codes are enacted for the purpose of safeguarding public safety and health through the regulation of building construction, building use and maintenance, and through the installation of utilities and the furnishing of certain types of services. Housing Codes are aimed at filling the gap in police power protection by requiring that existing structures also be adequate regardless of when built. In order to accomplish this objective housing codes generally establish minimum standards of space, facilities and occupancy. They have value not only in regulating the conditions under which people live but also in appraising the quality of the housing supply. This use is essential in implementing any type of urban renewal program.

Capital and Public Improvements Programming establishes a process of compiling capital needs of the city; evaluating, assigning priorities and scheduling these priorities usually over a six-year period according to the city's overall financial ability to pay. It is the most effective method for implementing proposals set forth in the land development plan.

The capital budget shows the public improvements which the municipality contemplates will be needed in the foreseeable future. Then the six-year program consists of the annual budget (operational activities and the capital improvements that will be undertaken during a fiscal year) with a five-year advance program. Only the first year of the program is a definite budget recommendation. The five additional years are estimates of the probabilities. Annual revision

is an essential feature of programming. This should be a part of the annual budget procedure. Each year the advance program is appraised and a new sixth year is added. The previous order of projects is revised in the light of new conditions. Through this procedure a new six-year program is developed in which the first year becomes a definite budget recommendation. This process is repeated annually.

The period for financial planning should look considerably beyond the six-year period for programming specific projects. Where public improvements are financed by borrowing the obligation incurred may possibly extend over a period of twenty to twenty-five years.



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